

THE ARCHITECTURAL FORUM

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LIBRARY

COMMERCIAL REMODELING

THE ECONOMY DRUG STORE
OUT RATE

OCTOBER 1944

TWO PICTURES

THAT SHOW THE AMAZING VERSATILITY OF

CEMESTO

REG. U. S. PAT. OFF.

The Multiple-Function Insulating Wall Unit

**Cemesto, the Complete Wall Unit
is AVAILABLE NOW for You to
Use in Almost Any Building Job**

THE REMARKABLE versatility of Cemesto has been firmly established in scores of wartime projects. This amazing adaptability of Cemesto to sound, speedy construction has stirred the interest of architects everywhere. As a result, new uses are being found for Cemesto in almost every kind of present-day building job—large and small. For industrial construction, in small homes, small business structures, farm buildings as well as in such special applications as conditioning rooms and drying rooms.

Cemesto is an unusual product. Its core of Celotex cane fibre insulation is sheathed two sides with an eighth-inch layer of asbestos cement bonded to the core with waterproof, vapor-resistant bituminous asphalt adhesive. It is fire-resistant, moisture-resistant. Its rigidity eliminates need for intermediate support. Both faces are smooth and hard, warm gray in color, provide agreeable interior and exterior finish without need for painting.

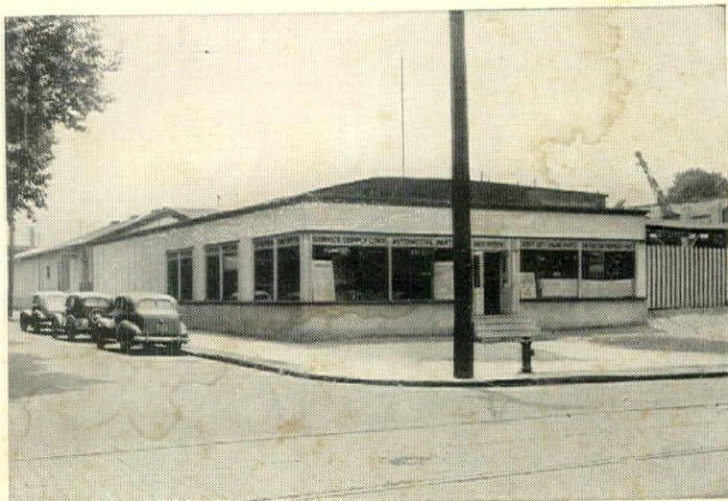
Cemesto comes in 4'-wide panels, 4', 6', 8', 10', or 12' long, and in thicknesses of 1 1/8", 1 9/16" and 2". Can be used either vertically or horizontally.

Cemesto can be cut to required sizes in advance, resulting in speed and economy in building walls and roof decks. There is no sacrifice in construction quality. It is truly a multiple-function material of many uses.

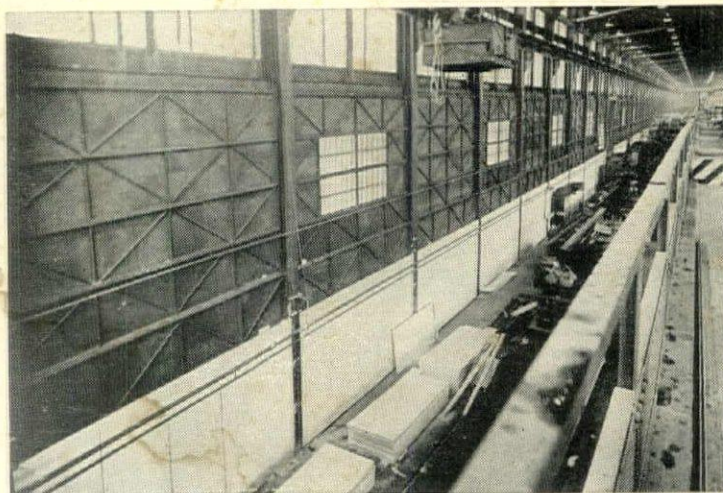
SOME OF THE VARIED USES OF CEMESTO

Airplane Plants and Hangars	Kilns
Bakery (proof ovens)	Mine Buildings
Cold Storage (Moderate temperatures)	Panel Boards for Mounting Controls
Conveyor Enclosures	Partitions
Dairy Barns and Dairies	Prefabricated Houses
Dough Conditioning Rooms	Radiator Recesses
Drying Rooms	Roof Decks
Factory Buildings	Service Stations
Fire Doors	Smelter Buildings
Incubation Houses	Spray Booths
Industrial Dryers	Tobacco Storage Rooms
	Tourist Cabins
	Train Sheds

FREE! Two Booklets, "Cemesto with Wood Framing" and "Cemesto with Steel Framing," are ready. They contain complete information for architects and builders on Cemesto and Cemesto construction. Write for your copies today to The Celotex Corporation, Dept. AF10, Chicago 3, Illinois.



This one-story building, housing the Service Supply Company of Philadelphia, has exterior walls of Cemesto. This is a typical example of how Cemesto can be adapted to speedy, small-type construction using a minimum of scarce building materials.



In the Kearney, New Jersey, plant of Western Electric Company, Cemesto panels are fixed to huge door frames of metal to stop heat transmission and infiltration losses. This is an example of how the unusual insulation qualities of Cemesto are utilized in industry.

IMPORTANT!

Without obligation, we will be glad to provide any technical assistance you may need regarding the use of Cemesto Wall Units. A note to us will bring a thoroughly trained Cemesto representative to your desk.

CELOTEX
REG. U. S. PAT. OFF.
BUILDING PRODUCTS

OCTOBER 1944

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A limited supply of THE ARCHITECTURAL FORUM's postwar planning booklet PLANNING WITH YOU is still available. Copies for distribution can be obtained by sending \$10 for the first hundred, \$5 for each additional hundred.

NEXT MONTH: A special issue on residential remodeling . . . large and small houses, farm homes, apartments, mock-ups and models of seven new design elements . . . completed jobs and projected designs.

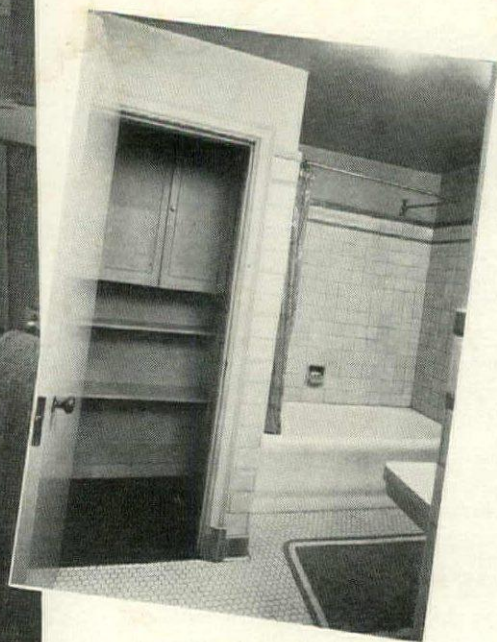
Since January 1, 1943, TIME, LIFE, FORTUNE and THE ARCHITECTURAL FORUM have been co-operating with the War Production Board on conservation of paper. During the year 1944, these four publications will use 73,000,000 lb. (1,450 freight carloads) less paper than in 1942. In view of the resulting shortage of copies, please share your copy of the FORUM with friends.

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Publisher, Howard Myers; *General Manager,* Ruth Goodhue; *Advertising Manager,* George P. Shutt.
THE ARCHITECTURAL FORUM is published monthly by Time Inc., at 19 W. 44th St., N. Y. 18, N. Y. Maurice T. Moore, Chairman; Roy E. Larsen, President; Charles L. Stillman, Treasurer; David W. Brumbaugh, Secretary. Subscription may be sent to publisher's office or to 330 East 22nd Street, Chicago 16, Ill. Address all editorial correspondence to 19 West 44th Street, New York 18, N. Y. Yearly subscription payable in advance. U. S. and Possessions, Canada, Mexico, South America, \$4.00. Elsewhere \$6.00. Single issues, including Reference Numbers, \$1.00. All copies mailed flat. Copyright under International Copyright Convention. All rights reserved under the Pan American Copyright Convention. Entered as Second Class Matter July 17, 1944 at the Post Office at New York, N. Y., under the act of March 3, 1879. Copyright 1944 by Time Inc.

The Modern Bath

... FOR OLD AND NEW HOMES



At left — A modernized bathroom with Built-In Weisway.

Because Weisways are equally well adapted for modernizing and new building, architects will find many uses for these leakproof Cabinet Showers, when war restrictions are lifted.

The "before and after" pictures above show what a striking modernization is possible. A Weisway built in with the "In-A-Wall" Entrance Adapter becomes an integrated unit of the bathroom wall. Thus the faults, such as shrinkage, cracks, and leaks, which often develop with built-on-the-job shower construction, are banished.

More people every day are coming to prefer the zest,

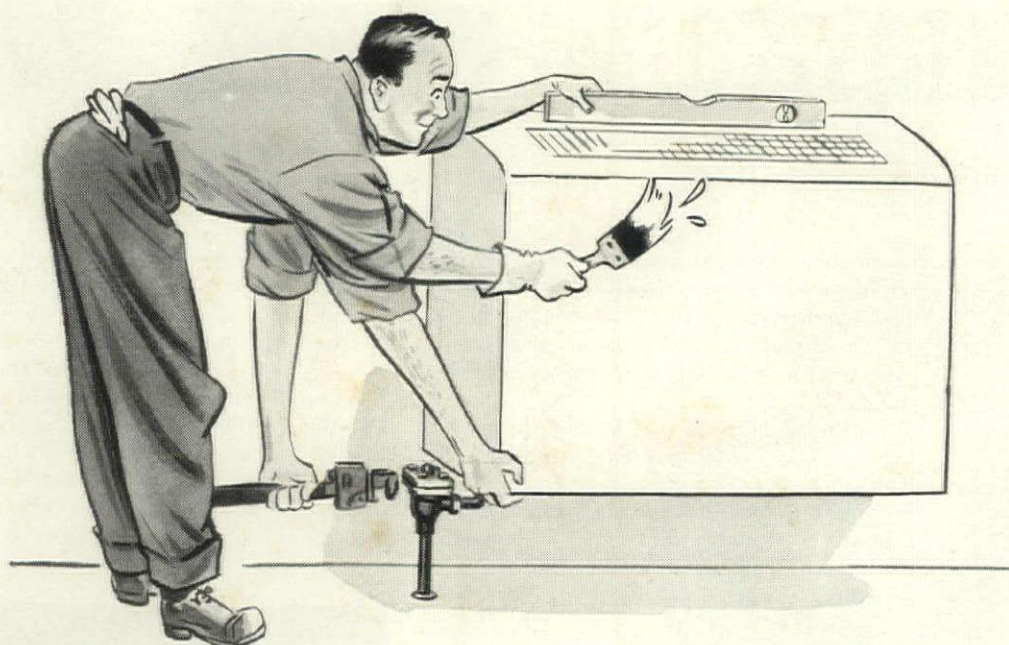
comfort and cleanliness of bathing in clear running water. When war restrictions end, Weisways will again be available in a complete range of models, suitable for homes of every size and price class.

For the new and modernized homes you plan remember, too, that Weisways make *added bath facilities easily possible even where floor space is limited.*

For immediate wartime needs, write today for information about the Weisway V Deluxe. Henry Weis Mfg. Co., Inc., (Est. 1876) 1002 Oak Street, Elkhart, Indiana.

Weisway

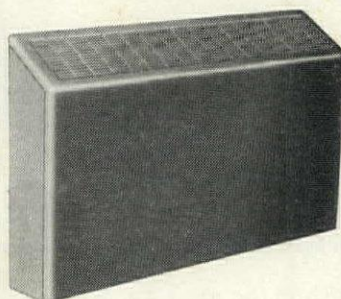
CABINET SHOWERS



ONE MAN DOES THE WORK OF FOUR when TRANE Convectors are installed

Light Weight Heating unit not only saves installation time but can now be shipped sooner

When Trane Convectors were installed at a west coast naval hospital it was possible for one man to do the work of four. Here's why—



Trane Convectors weigh one-fourth as much as conventional cast iron heating units. The same crew of men can unload four convectors to one cast iron radiator. Wall hung Trane Convectors can be completely mounted in the same time it requires to mount only the hangers for cast iron radiators. The smooth surfaces of the Trane Convector can be painted much faster than the rough hard-to-get-at surfaces of old-fashioned heating units.

Of course thousands of convectors were installed in this big naval hospital. But proportionately the same amount of installation time can be saved on all jobs,

small or large. Whether for one war worker's home, or a factory to build B-29 bombers, Trane Convectors save valuable man-hours at a time when every minute of every worker is vital.

Not only that, but today Trane Convectors can be shipped faster. Trane Convectors are not dependent on manpower-drained foundries. In most in-

stances Trane Convectors can be shipped in one-third the time required for cast iron radiators.

Add the advantages of time saving and quick shipment to all the other features, such as quick heat, cleanliness, space saving, and low cost, when you consider the heating unit for your job.

TRANE

THE TRANE COMPANY • LA CROSSE, WISCONSIN
TRANE COMPANY OF CANADA, LTD., TORONTO
AIR CONDITIONING HEAT TRANSFER AIR HANDLING EQUIPMENT



Information for this advertisement furnished by H. C. Hastorf of San Francisco, a heating contractor on this mammoth government project

FORUM OF EVENTS

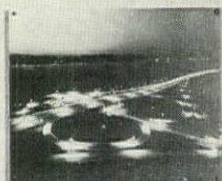
THE FORUM synthesizes postwar living for Chautauqua Institution's examination of the world today.

Originally conducted as a two-weeks seminar for Methodist Sunday school teachers, the annual summer gathering at Chautauqua, N. Y., has, in 70 years, evolved from an old-fashioned camp meeting to a nationally famous festival of culture.

The broad horizons of Chautauqua, as it is known today, were first envisaged with the foundation of a Literary and Scientific Circle. Soon lectures, concerts and operas were added; a library, community center and 50 individual music houses for piano practice built.

Now, when the quest for purely academic education has been replaced by an urgent need for understanding the modern world, the Chautauqua Institute has met the challenge with characteristic progressiveness. The 1944 season featured certain days allotted to representative business firms so that they might make clear their public usefulness. One of these was Publisher's Day, presided over by *Time*, Inc. As its contribution, THE ARCHITECTURAL FORUM endeavored to present a synopsis of what may be expected of the postwar environment:

This is a picture of postwar America
It is fragmentary still--but it is also real
It is a picture of better communities



where cars can move swiftly and freely



while children play
safely in the sun ■ ■ ■

and schools have light, air



and elbow room



where women can shop
without haste or discomfort

away from the noise of traffic



where work in factory and
office is no longer drudgery

EXHIBIT BEGINS WITH TWO PANELS LISTING POSTWAR OBJECTIVES IN GENERAL TERMS

The house for the postwar community is
efficient, easy to run



it lets in the view and
the sun



and can keep it out too ■ ■ ■



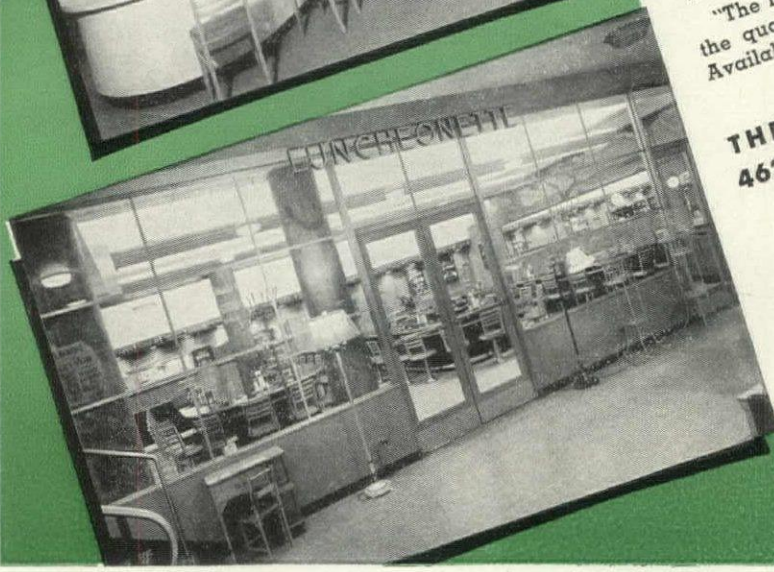
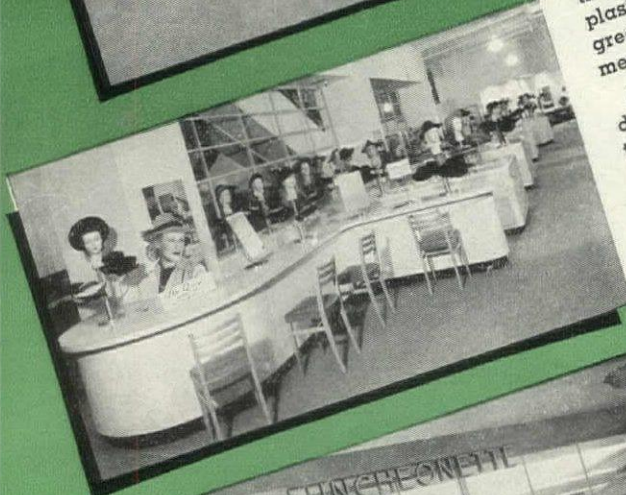
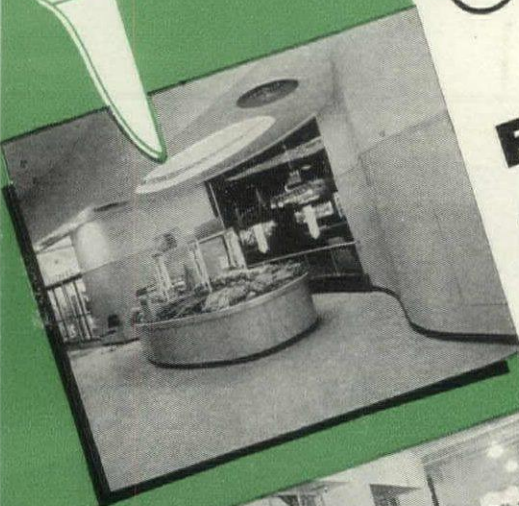
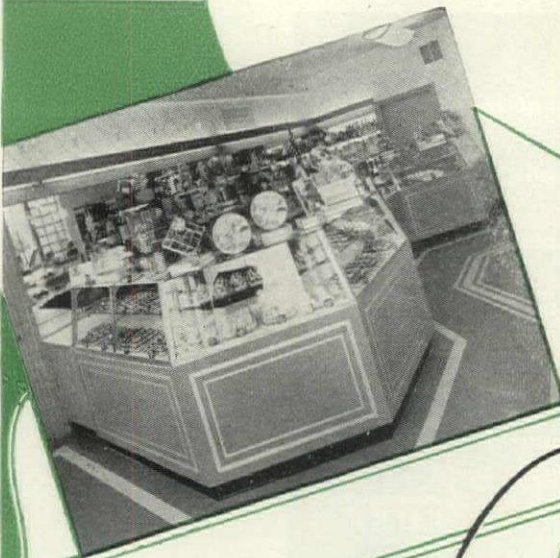
It uses native local
materials in new ways

It is good to work in



and it is good to rest in ■

AND CONTINUES WITH A BRIEF SUMMARY OF THE INHERENT ASSETS OF FLEXIBLE DESIGN



When you design a store— **FORMICA IS A MUST!**

LEADING designers of stores in years past have secured such sparkling and interesting modern results with Formica that they can no longer afford to design such commercial premises without considering it.

Sales counters, lunch counters, table tops, column covering, back bars inlaid with silhouette designs, show window backgrounds, doors, wainscot, stairwell wall covering—these are a few of the uses in which Formica laminated plastics have produced fresh and telling effects that have greatly increased the selling effectiveness of the establishment.

Formica is a handsome modern material, with smooth, dense, non-porous surfaces in a wide variety of colors, patterns and genuine wood grains.

It reduces maintenance and cleaning costs. It can be kept in perfect shape by washing with soap and water, or with solvents, if that becomes necessary. It does not stain with ordinary liquids, and for horizontal surfaces may be had in a cigarette-proof grade.

Ask for data describing methods of installation and for writing specifications.

"The Formica Story" is a moving picture in color showing the qualities of Formica, how it is made, how it is used. Available for meetings of designers and business groups.

THE FORMICA INSULATION COMPANY
4620 Spring Grove Avenue • Cincinnati 32, Ohio



Planned large-scale construction
of protected neighborhoods



work centers



and
recreational facilities
will replace haphazard,
piecemeal building ■

To chart the outline of the future
separating valid trends

from momentary fashions

to help give direction to

U.S. building and planning

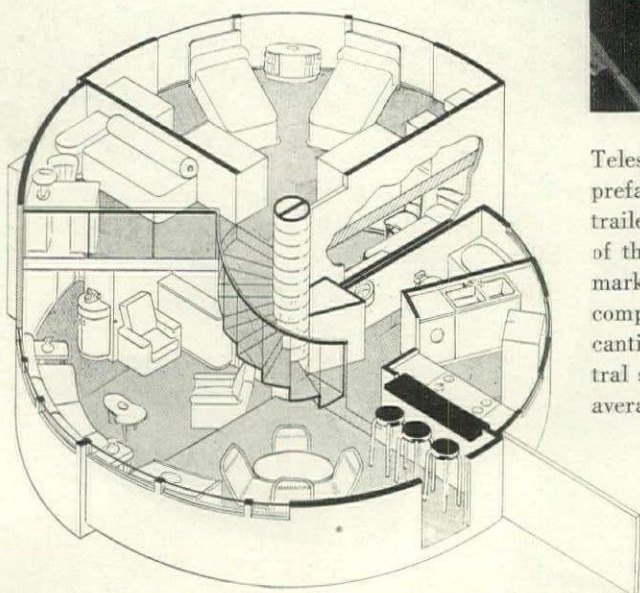
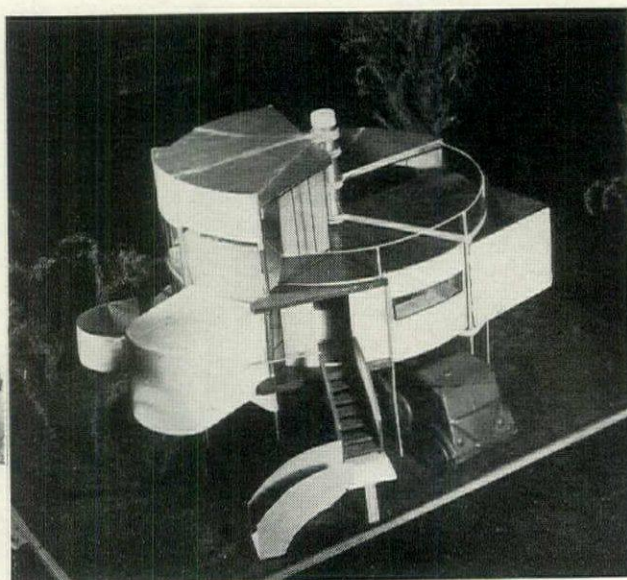
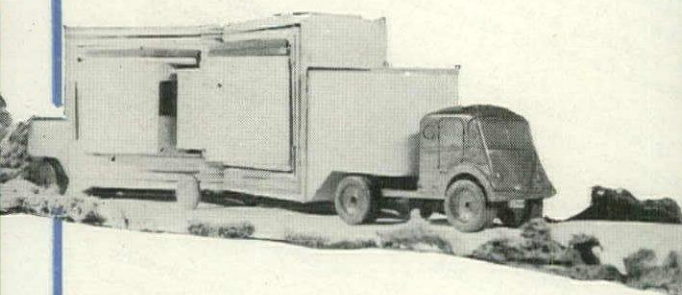
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FORUM**



COMMUNITY AND URBAN PLANNING. THE FORUM'S OVER-ALL AIM CONCLUDES THE EXHIBIT

POSTWAR DESIGN OF THE MONTH



Telescoping as neatly as a polished spyglass, this portable, prefabricated, circular house can be hauled around like a trailer and, when collapsed, is not much larger. As yet none of these units has been constructed but the design is earmarked by real ingenuity and livability despite a highly complex assembly. Composed of a series of pie-shaped, cantilevered sections which swing out, fanwise, from a central supporting mast, the single story version provides four average size rooms. A two story (Continued on page 202)

A PROFITABLE FIELD

for Architect and Builder!



— stimulated by the new Kawneer Program!

LEADING ARCHITECTS AND BUILDERS throughout the nation are becoming more and more interested in the store-front field, which is definitely due for tremendous activity in the years ahead.

The demand for architectural and design services with stores is growing every day. Retail merchants now recognize that proper planning and design create extra selling power. The new Kawneer program, reaching hundreds of thousands of retail merchants in every

trade, is accelerating this national trend.

Kawneer Store-Fronts—"Machines For Selling"—are being promoted with special emphasis on the importance of the function of good design.

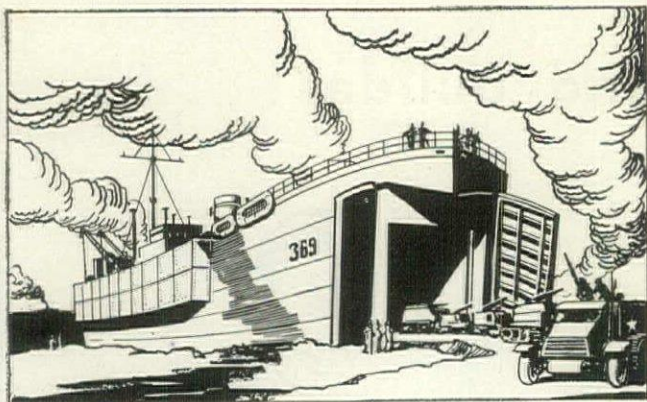
You can tie into this national campaign, obtain valuable help from Kawneer field men, create more effective fronts with new Kawneer products. *WRITE The Kawneer Company, 210 Front St., Niles, Michigan, for ADDITIONAL DATA ON THE KAWNEER PLAN.*

Kawneer
STORE-FRONTS

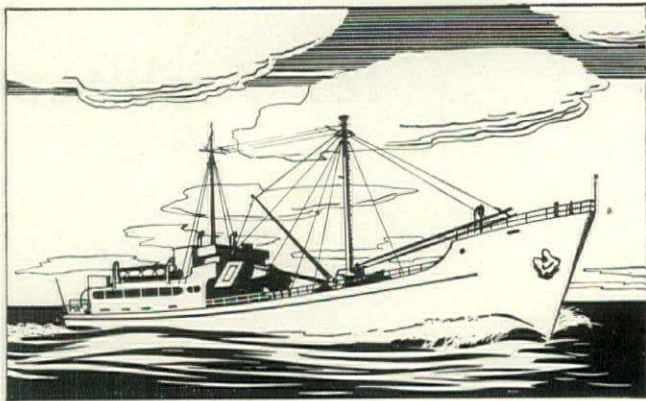
MACHINES FOR SELLING!



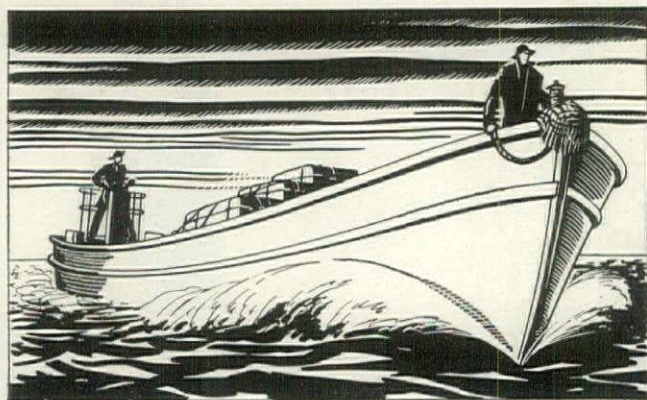
Everywhere you look—



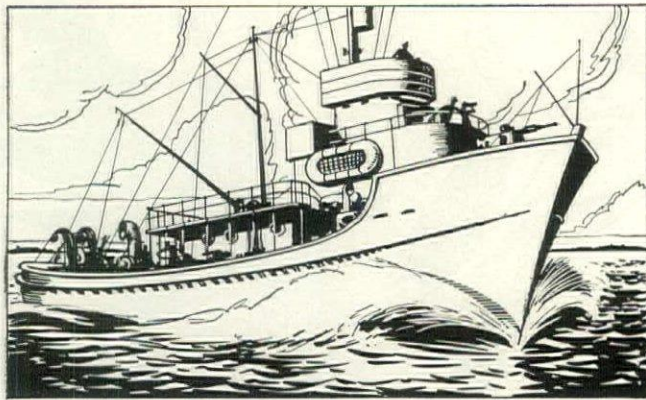
LST's ARE CARRYING TANKS that do their job in war and never go ashore! Their Ship's Whistle Tanks and Ship's Service Tanks are welded by Case craftsmen to meet the severe service conditions encountered in amphibious assignments.



WHEN THE ARMY GOES to sea, Case tanks go too. Air, water, fuel and other supply services are maintained dependably from Case tanks. They help numerous types of craft such as this Army Supply Vessel to "keep going in rough going."



LAUNCHES' FUEL TANKS must be especially rugged and reliable. So must tanks installed in Submarines, Destroyer Escorts, Transports, Cargo Ships. For all these types of vessels, Case welded tanks have been furnished to leading ship builders.



UNFAILING PERFORMANCE under all conditions of sea and weather is expected of Mine Sweepers and their equipment. Hundreds of them in U.S. and British service are equipped with Case Hot Water Generators and Expansion Tanks.



Case

METAL PRODUCTS ★

★ American shipbuilders and the Services for which they are building want "happy" ships. Hot and cold water, fuel, air and other supply services must serve

without fail. That's why, "everywhere you look", you see Case welded tanks aboard so many types of vessels. W. A. Case & Son Mfg. Co., Buffalo 3, N. Y. Since 1853.

HOW TRUSCON IS HELPING *Spur Postwar Planning* **NOW!**



THE TIME IS GETTING SHORT . . . the end of the war is within sight . . . and American business must plan its postwar building program with increased energy and foresight!

Truscon is helping stimulate this action with a new series of advertisements in **BUSINESS WEEK**, whose readership is over a half-million important business executives and civic leaders.

Truscon is illustrating and describing actual jobs that are down on paper, ready to go . . . plans drawn and everything set for the actual placing of contracts and immediate starting of work.

Truscon feels that the publicizing of these jobs . . . big jobs, involving large expenditures of money . . . will encourage American business and municipalities to embark on a nationwide program to fill building needs. The necessity for immediate cooperation with architects and engineers is amply emphasized. We hope that you will benefit from this campaign in many ways.



TRUSCON

Steel Company

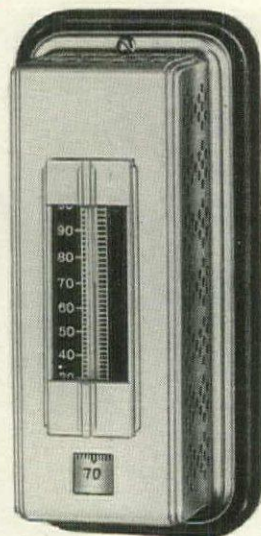
YOUNGSTOWN 1, OHIO

Subsidiary of Republic Steel Corporation



THIS IS IT

75°



ROOM BY ROOM

73°

ROOM BY ROOM

71°

70°

ROOM BY ROOM

COMFORT CONTROL FOR INDIVIDUAL ROOMS

Where there is Johnson Comfort Control . . . with a thermostat in every room . . . *real* comfort prevails!

Turn the adjusting dial on the thermostat in any particular room to the temperature desired and that temperature will be maintained in that room despite wind, direct sunshine and other weather conditions which often upset the "averaging" effect of a centrally located thermostat.

When comfortable conditions prevail in every room, fuel is conserved, too, for there is no overheating in some rooms and therefore no tendency to open windows to "cool off."

Comfort Control for individual rooms is conducive to good health and well being. Pioneered by Johnson nearly 60 years ago . . . and with the numerous refinements made by Johnson engineers through the years since then . . . it meets many of today's modern comfort requirements more effectively than any other type of temperature regulation.

Johnson Comfort Control is adaptable to all types of buildings. If you would like to know more about its specific application to a particular modernization or new construction project, get in touch with the Johnson office nearest you. Direct branches are in all principal cities.

FOR VICTORY SOONER
BUY MORE BONDS

JOHNSON

*Fuel-Saving
Starts With
CONTROL*

Automatic

TEMPERATURE AND
AIR CONDITIONING

Control

JOHNSON SERVICE COMPANY, MILWAUKEE 2, WISCONSIN • DIRECT BRANCHES IN ALL PRINCIPAL CITIES



FRINK-built frames help army radios over the rough spots

Radio apparatus going forward with the U. S. Army must travel over some mighty rough terrain. Trucks equipped with transmitters and receiving sets are provided with special frames to which the radio instruments are attached. Thus these delicate pieces of machinery are held stationary and are protected against the banging and bumping of uneven ground.

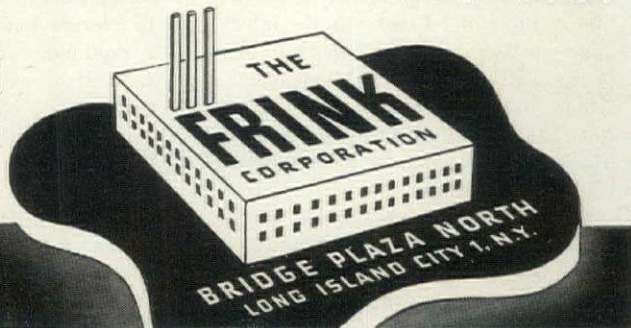
Many of the sturdy radio frames used in U. S. Army trucks are made by Frink. The Frink Corporation has specialized in precision engineering and manufacturing for 87 years. During that time the name Frink has become synonymous with quality and skill in the lighting industry.

Frink was instrumental in developing Incandescent lighting in the days when that method of illumination was considered revolutionary. Likewise The Frink Corporation has pioneered

in the development of Fluorescent lighting. LINOLITE, the famous "engineered for vision" Fluorescent equipment, is a product of Frink designing and manufacturing skill. LINOLITE is now giving efficient and profitable service in many of America's foremost factories, stores and banks.

Today Frink is heavily engaged in war production. Tomorrow Frink will resume the designing and manufacturing of the high-quality lighting equipment that has gained such an enviable reputation in the industry.

LIGHTING SINCE 1857



Subsidiaries: Sterling Bronze Company, Inc.

Barkon-Frink Tube Lighting Corporation

★ ★ ★ All Frink employees invest at least 10% of their earnings in War Bonds ★ ★ ★

WE ARE PROUD OF THAT RECORD. LET'S ALL BUY WAR BONDS!

PRODUCTS AND PRACTICE

DRYWALL CONSTRUCTION prevents moisture penetration without recourse to waterproofing material.

Although most building problems can be turned into mathematical equations with accurately predictable results, there are many enigmas which continue to baffle the architect and for which no foolproof solution has been found. The penetration of storm water into building structures is one such question mark in the construction rule book. In the case of masonry walls, furring is usually necessary to prevent moisture penetration, but even this added expense does not always effect a cure. Its benefits can be counteracted by either poor workmanship, inferior materials, bad detail or inadequate waterproofing of interior and exterior surfaces. Because of the many factors involved attempts at making the construction waterproof have sometimes failed.

After years of groping the answer may at last be found in a simple system of wall construction which almost eliminates conventional waterproofing, but which is much more effective in combating water leakage than the old methods. By applying the laws of physical science to building, architect Franklin O. Adams of Tampa, Fla. has devised a new system which he says has not failed in more than ten years of constant use in buildings of varied construction.

WEATHERPROOFING WITH HOLES

Oddly enough, his results are accomplished by opening holes of more than nominal size in the weather faces of the walls, thus equalizing air pressures on the two sides of the exterior wall. The suction which ordinarily results from a lower inside pressure is eliminated. This difference in atmospheric pressures, Adams believes, is what normally causes penetration of water through a vertical wall surface. By application of this theory he has been able to completely eliminate furring on masonry construction and to paint directly on the interior and exterior surfaces of hollow block or tile walls. He even cured leakage in a hotel built of hollow tile by punching some 500 holes into the outer wall and inserting tubes which connected the wall voids with the outer air.

Because of the semi-tropical weather of peninsular Florida with its sudden and violent changes from hot and dry to cool and wet, Adams had a good testing ground for the leakage problem. Even so, he made his discovery after trying every orthodox water repellent known as well as some decidedly unorthodox ones.

Adams' own account of the trial and error process by which he finally uncovered his new system is perhaps the best explanation of exactly how it works. "My first clue came while helping in the construction of a 13-story office building," he explains. "The exterior surfaces of this building were so-called impervious brick and the windows (steel double hung) were rated as probably the most nearly storm proof for high buildings. The interior courses of the external walls were hollow brick and these were treated with two coats of waterproof plaster-bond material. The roof never gave trouble, but during rain storms with winds of from 50 to 70-mile velocity, the walls leaked badly and water in considerable quantities came in at the window sills in spite of the fact that in doing so the water had to ride up over a baffle at least 1 in. high, down into a channel in the steel sill and then up nearly 2 in. to flow out over the wooden stool.

"I suspected from this and other observations that this serious penetration was not due to the impact of the storm and proved it by building a free standing brick pier approximately 30 in. wide, 8 in. thick and 4 ft. high, and after proper setting and drying, subjecting it to a hose test. Water with estimated impact force of 60 lbs. to the ft. was played upon one face of the pier for six hours. Subsequent examination of the pier showed a penetration averaging only $1\frac{1}{4}$ in. In the case of the office building water had appeared inside under much less than half the pressure, through 12 in. of brick, plus waterproofing, plaster and oil paint all in less than two hours.

STORM WITHOUT LEAKAGE

"In a vainly speculative mood and for purposes of temporary domicile, I had just purchased a "Cracker-built" house. In Florida parlance that term indicates a minimum of material—no sub-floor, no wall or roof sheathing, no building paper. The roof was of riven cypress shingles on stripping with many openings big enough for a mouse to get through. The sash was so loose in the runs that in a windstorm the window shades assumed a horizontal position. My astonishment can be imagined when after several severe tests it became evident not only that the walls, roof and windows had not leaked, but they apparently had no intention of doing so.

"Then the light began to dawn. The

impact of the storm had little if anything to do with penetration. In fact there had been liberal penetrations observed during the summer rains with little or no wind; and there was the evidence of the free standing pier subject only to impact. On second thought, however, this phenomenon became understandable. Confined air is resilient, whether occupying the pores of materials, the voids within walls or the space within buildings and would therefore have a repulsive reaction against the impact of storm driven water. At this point the answer became rather obvious. If water was not being pushed into the building, then it had to be pulled in by suction for it was certainly going in.

AIR EXHAUSTION

"The conclusion was that something must be causing a material reduction in the air pressure within the building to force the water to penetrate the walls, and within the wall voids to induce water to enter there. Either of two conditions might produce that effect. One would be the exhaustion of air within the building in a manner similar to that produced with a vacuum pump and the other would be a reduction of the air pressure in confined spaces by a lowering of the air temperature within these spaces. Two rather violent phases of Florida weather can and do provide these conditions on occasion. One of these is the so-called tropical hurricane which may be expected during the autumn months and the other is the rainy season which usually lasts during the three summer months. Similar, though less extreme conditions maintain in corresponding weather phases of all climates with definitely similar, if less spectacular results. The storm or hurricane lasts six or eight hours, varies greatly in intensity, but is always accompanied by torrents of rain which seal all cracks, pores and other openings on the windward side of the building. The movement of the wind past the building and the partial vacuum thus caused on the lee side where windows or doors are apt to be open, tends to exhaust the air within the building, emphasizing the differences in pressure on either side of the windward wall. Then the air moves inward through the small openings to satisfy the falling pressure and in so doing exerts a very powerful suction on the water which completely covers the weather face of the wall. The water quickly follows the air into the building.



ONE OF MANY JOBS on which drywall construction has been used is Riverview Terrace housing project. Built of hollow concrete block, whitewashed on the exterior and plastered on the interior without waterproofing or furring, the walls are made weatherproof by open ports which equalize pressures between outside air and air within the wall envelope.

"During the rainy season there is a hard shower almost daily, often two or more, preceded and followed by periods of hot sunshine. Surface temperatures of walls reach 125-150° F. while that of the rain water is about 75° F. The showers come and go suddenly and are of brief duration. During the periods of sunshine the heat of the sun materially raises the temperature of the air in the voids characteristic of practically all walls, from the large spaces within hollow concrete block and clay tile to the joint voids in brick masonry and even to pores and cracks of bricks and mortar material. Under this added heat the enclosed air expands and the excess under pressure leaks out through the cracks and pores. The sudden downpour of the shower seals the entire surface of the walls and at the same time, by chilling and rarefying the remaining enclosed air and thus creating a minus pressure, sets up a very strong suction which draws the water into the voids.

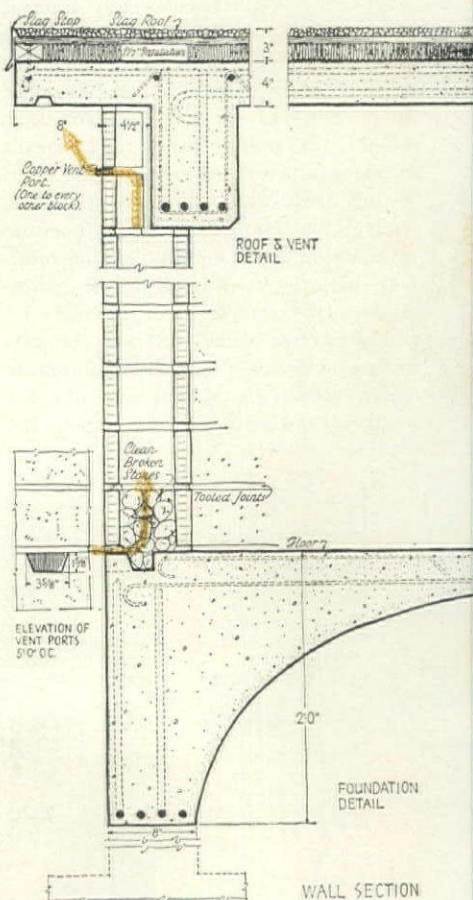
SUCTION STRENGTH

"Many persons with whom this theory was discussed believed that the strength of the suction thus stimulated would be negligible. They failed to realize that the low ratio of the area of the pores to the volume of rarefied air is a pertinent factor. An infinitesimal amount of heat energy will immediately and mate-

rially increase the pressure within an enclosed volume of air. This is demonstrated, for instance, by the "dime and beer bottle" experiment. Place a dime over the top of a recently emptied, still cold beer bottle and tip the bottle to permit the beer inside to seal the dime in place. When the bottle is righted the dime will immediately begin to pop up and down to relieve the pressure as heat enters the bottle through the glass. The action will accelerate almost at once if the hands are placed against the bottle thus augmenting the entry of heat, all in spite of the fact that silver, one of the heaviest of the elements and that the actual temperature rise is immeasurably small. Assuming a rise in temperature of the air enclosed in a wall void from 80° F. to 100° F. the pressure within the void would increase approximately 0.5 of a lb. per sq. in. or about 70 lbs. per sq. ft. Cooling through the same range of temperatures would produce an equivalent drop in pressure, powerfully inducing suction.

"An interesting illustration of the strength of this suction was a problem brought in by a carpenter. He had renewed a roof on a residence using sawn shingles, and, though the roof had a good pitch, it leaked during the rainy season. Questions brought out the facts that: 1) the attic space was large and

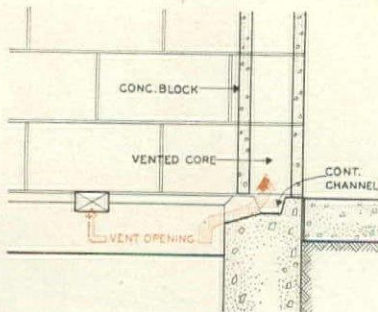
INTRODUCTION OF OUTSIDE AIR into hollow masonry blocks to raise inside air pressure is illustrated in construction detail. With the inner wall of the blocks made airtight, this system of port ventilation prevents the establishment of suction and its consequent drawing of water.



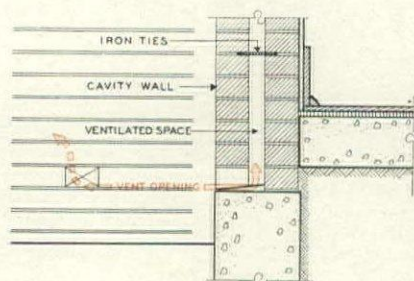
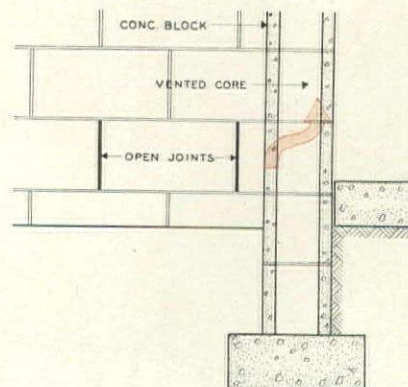
PRODUCTS AND PRACTICE

unventilated; 2) the shingles were laid close; 3) the shingles removed in trying to correct the trouble were wet at the laps; 4) the roof was not insulated. In this case, the large volume of air in the attic had been heated to a high temperature by the sun and the temperature had dropped suddenly under the cold rain. The intense resulting suction had drawn the water uphill between the laps and over the top edges of the shingles, from which point it had dripped upon the plaster below. The condition was permanently corrected by placing louvered vents in the gable ends of the attic, thus breaking the suction.

"From these and many other experiments over a period of nearly twenty years, a definite system of wall construction has been developed based upon a very simple principle—a principle so naive it seems incredible that no one has thought of it during centuries of building leaky structures. *Leaks (except those resulting directly from gravity) are invariably due to a lesser pressure within than without an enveloping shell which is not air tight, whether the shell is taken to mean the walls and roof of a building or the material enclosing voids within the walls.* Therefore to get a leak-proof building the shell must be made air tight (a costly and almost impossible attainment) or the difference in pressures must be neutralized. My effort has been toward neutralizing the pressure differentials. Because the control of pressures is more practical and positive if kept beyond the interior spaces of the building itself, and its wall voids, I have interposed between those interior spaces and the weather an envelope of air automatically kept equal to the weather pressures by means of external ports or vents in an intervening baffle wall which takes the impact of the weather. Since no horizontally acting force such as suction interferes with the downward pull of gravity on the surface storm water, the material composing the baffle wall may be anything that does not actually disintegrate under conditions of exposure to the weather. Porosity, cracks, open lap



APPLICATION of the dry-wall system differs with various types of masonry construction although the principle of equalizing interior and exterior air pressures to prevent moisture penetration remains the same. With hollow concrete blocks, (above) a continuous channel is formed in the foundation which allows air to circulate from the port up through the wall. Leaving open the exterior head joints between the blocks in one course (above right) is also effective. With a brick cavity wall (right) ports are made by eliminating a brick at certain points in the construction.



joints or even holes if not too extensive are not practical handicaps.

"Ports may be placed at any desired height above the ground, but there must be no enclosed space without at least one such port. If ventilation of the wall space is sought in addition to pressure relief, the port should be placed as near the bottom of the space as possible and there should be a top outlet. Through lack of confidence in the system during the early days of experimenting, the ports were always placed at the bottom for drainage purposes, but it has been definitely determined that no free water penetrates the baffle wall or the ports and hence drainage facilities are unnecessary."

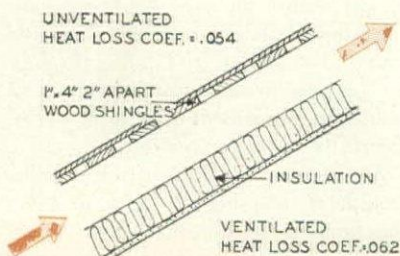
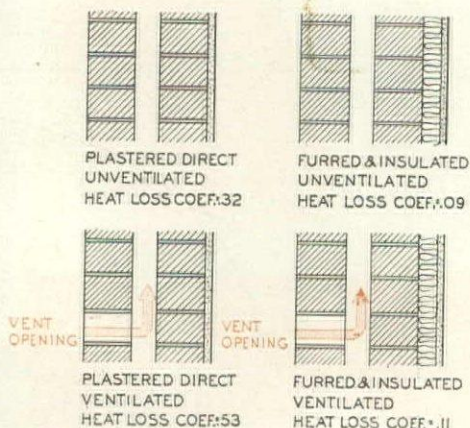
Although Adams has experimented with his dry-wall construction only in Florida, the theory can undoubtedly be adapted to northern structures which must meet similar weather situations in milder form. Its practical application would vary with different parts of the

country and with specific jobs and materials. In addition to its value in preventing moisture penetration, both northern and southern states would find dry-wall construction helpful in excluding sun heat. Construction problems in cool climates would, of course, be influenced by the fact that ventilation reduces the insulation value of a wall. For this reason insulating materials would be a necessity in conjunction with the dry-wall system except in semi-tropical areas.

For instance, a wall consisting solely of ventilated hollow masonry blocks, as used by Mr. Adams in Florida, would be impractical for use in New England. The importance of this factor would vary from one type of construction to another. Insulating values of frame walls would be negligibly influenced by ventilation. Both concrete block and cavity brick walls would be considerably reduced in insulation value by the opening of ports, but the importance of this reduction would be much less in the case of masonry with an added layer of insulation. This would also be true of ventilated roof construction unless adequate insulation were installed.

One obvious application of the Adams' principle would be to the so-called brick cavity wall. Originally designed to prevent water leakage, this wall is distinguished by a continuous vertical and horizontal air space bridged by no masonry ties, but by metal ties embedded in the mortar joints. It also has no masonry connection at door and window jambs. Because of this absence of header brick connections, moisture

(Continued on page 158)



VENTILATING PORTS noticeably increase the heat loss of a construction except when insulation is incorporated.



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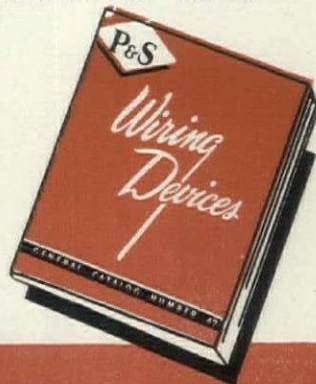
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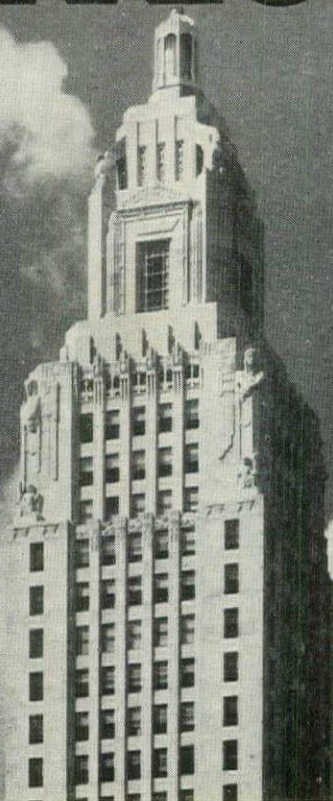
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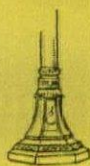


Count the many ways

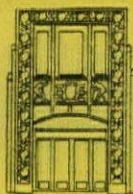
ARCHITECTURAL



STAIRS



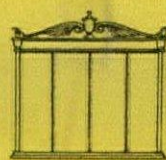
FLAGPOLE BASE



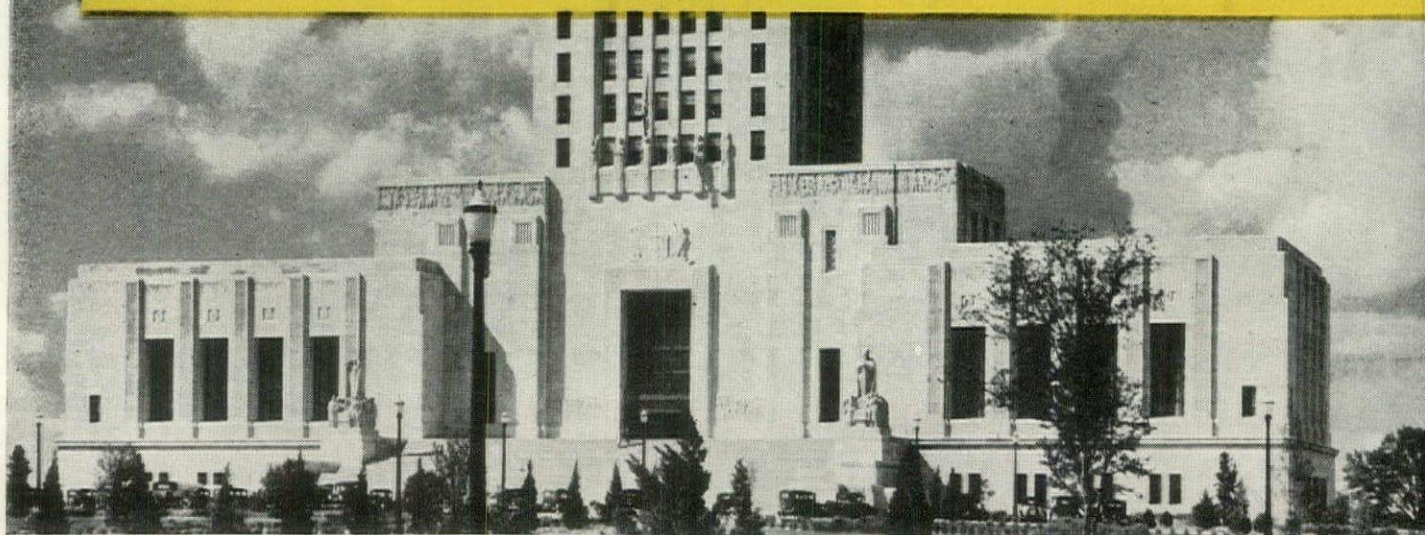
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LIGHTING FIXTURES



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Photo by S. H. Gottscho

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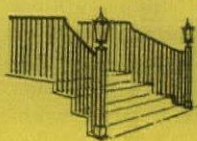
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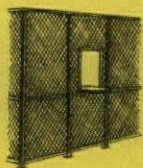
You may need extra strength or protection in building devices — in service equipment—in construction equipment. Here again architectural metals hold the answer.



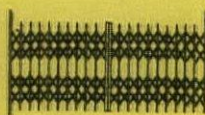
HAND RAILINGS



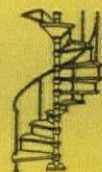
DECORATIVE GRILLES



WIRE MESH PARTITIONS



FOLDING GATES



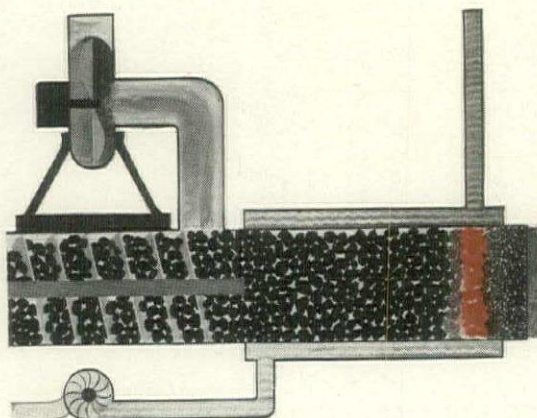
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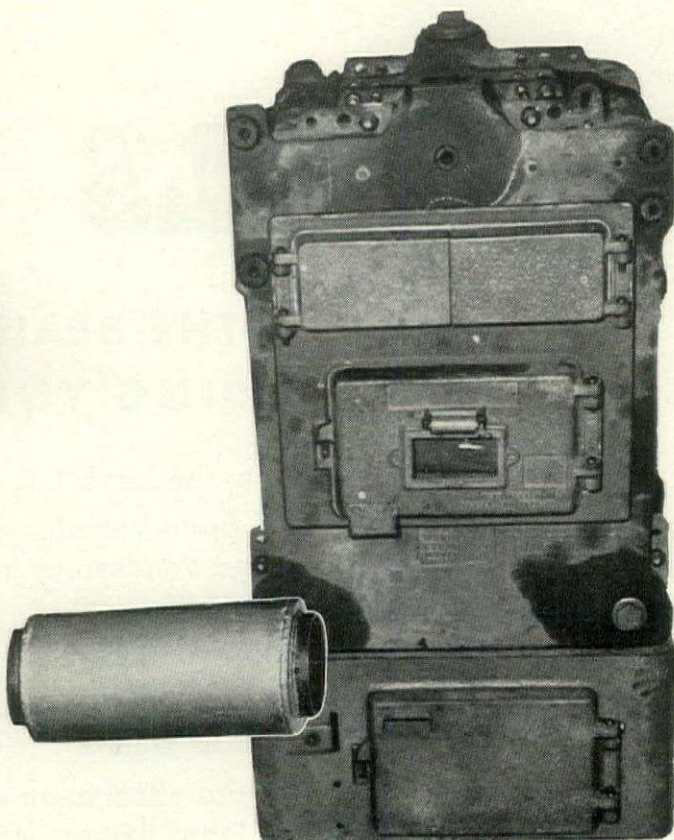
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NEW 75 LB. HEATING UNIT is a simple metal tube through which coal is fed in a continuous and automatic process (see diagram above). In comparison with complicated prewar equipment (right), it is small and compact, burns 50 to 60 lbs. of anthracite per hr. instead of the former 10 lbs., thus liberating 500,000 BTU per cu. ft. Resulting heat absorption per sq. ft. of heating surface is raised from 6,000 BTU to 40,000 or 50,000 although total coal consumption is reduced.



TECHNICAL NEWS

A NEW PRINCIPLE of burning anthracite for home heating, developed by Anthracite Industries, Inc., will make possible small, cheap, completely automatic heating units after the war. This new development substitutes a concentrated fast-burning fire in a steel tube only 18 in. long and 6 to 8 in. in diameter for the former method of burning anthracite slowly in a large firebox. Test models reveal that the burning rate of coal and the heat output are increased five times by the new method. Almost complete combustion is obtained without the

secondary air spaces necessary in old-fashioned furnaces. Since less coal is ignited at one time and the burning is more complete, less coal would be consumed during the heating season.

Coal is fed into one end of the small metal tube by a worm, and ashes are discharged at the other end, making stoking and ash removal unnecessary. Draft is provided by air which enters at the ash end of the tube and is drawn through the incoming coal by an induced draft fan in the smoke pipe.

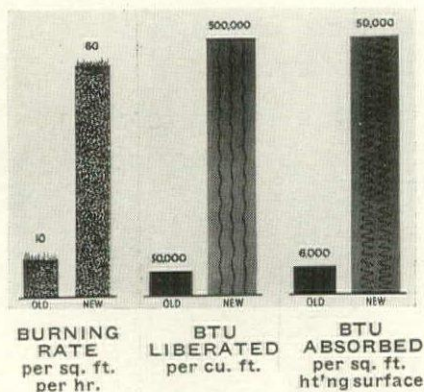
A pump forces water into a small, compact jacket around the sides of the tube, cooling the burning coal enough to completely eliminate clinkers. One motor furnishes power for all three mechanisms — worm, forced draft fan and water pump. Their operation is synchronized and thermostatically controlled. The complete mechanism fits into a space 2 ft. by 2 ft. by 3 ft. Like prewar furnaces, it is necessary to light the new unit with newspaper and kindling or with specially prepared kindlers. These are placed at the ash end of the tube and because of the forced air draft quickly light the coal. Maximum heat is reached in 15 minutes as compared with almost an hour in former furnaces.

The unit as described is particularly

adaptable to hot water heating systems since water for circulation throughout the house is drawn directly from the water jacket used for cooling the unit. With steam heating systems the jacket would be enlarged at the top providing a steam liberation space. In warm air systems the water jacket would be dispensed with and fins built up through which air would be circulated, again serving the double purpose of cooling the fire-box and providing warm air for heating. These methods are under discussion by the stoker, warm air and boiler manufacturers who will start production when materials are available.

Initial cost of the units will be substantially lower than prices of prewar furnaces since the new mechanism is so simple and consequently easy to install. One is sufficient to heat an ordinary 6 to 9 room house. Combined units could be used for industrial heating, although as yet no plans have been made for commercial application. Because of the tube's small size it is a good solution for heating basementless houses which have no extra space to accommodate a large furnace. Even more important, it provides a good, low cost heating unit for use with hot water radiant heating.

(Continued on page 226)



INTENSE FIRE in a small area raises burning rate and heating efficiency of anthracite in contrast to old slow-burning method.

Look to the future through screens made from Saran—a Dow Plastic

The hot, humid, steaming jungles of the far east have served as an exacting proving grounds for insect screen. But, tough as these extreme conditions may have been on most materials, they did not affect screens made from Saran . . . for this Dow plastic is tough itself—as tough as they come.

Hence, when extruded as a monofilament and woven into an open mesh cloth, it makes a screen material that can really “take it.” It is not subject to corrosion which ordinarily shortens the life of iron and copper screens. It is truly a remarkable advance over the time-honored variety.

For Saran ignores extreme weather—hot, cold, dry, humid . . . they are all the same to this plastic. Rain doesn't bother it a bit, for one of Saran's outstanding characteristics is its amazing resistance to water.

Similarly, Saran is not affected by either sulfur fumes found in the coal smoke of large industrial cities or salt atmosphere along the seacoasts—long arch enemies of the finest screens. It can be cleaned by brushing or washing with soap and water.

a lustrous new **SCREEN STAR**

Because it is open mesh cloth, screens from Saran are lighter and more easily put up, taken down, or stored. And good visibility is obtained with a finer mesh.

Screen from Saran is fabricated by licensed manufacturers. We shall be glad to put you in touch with one of them, or send you more information.

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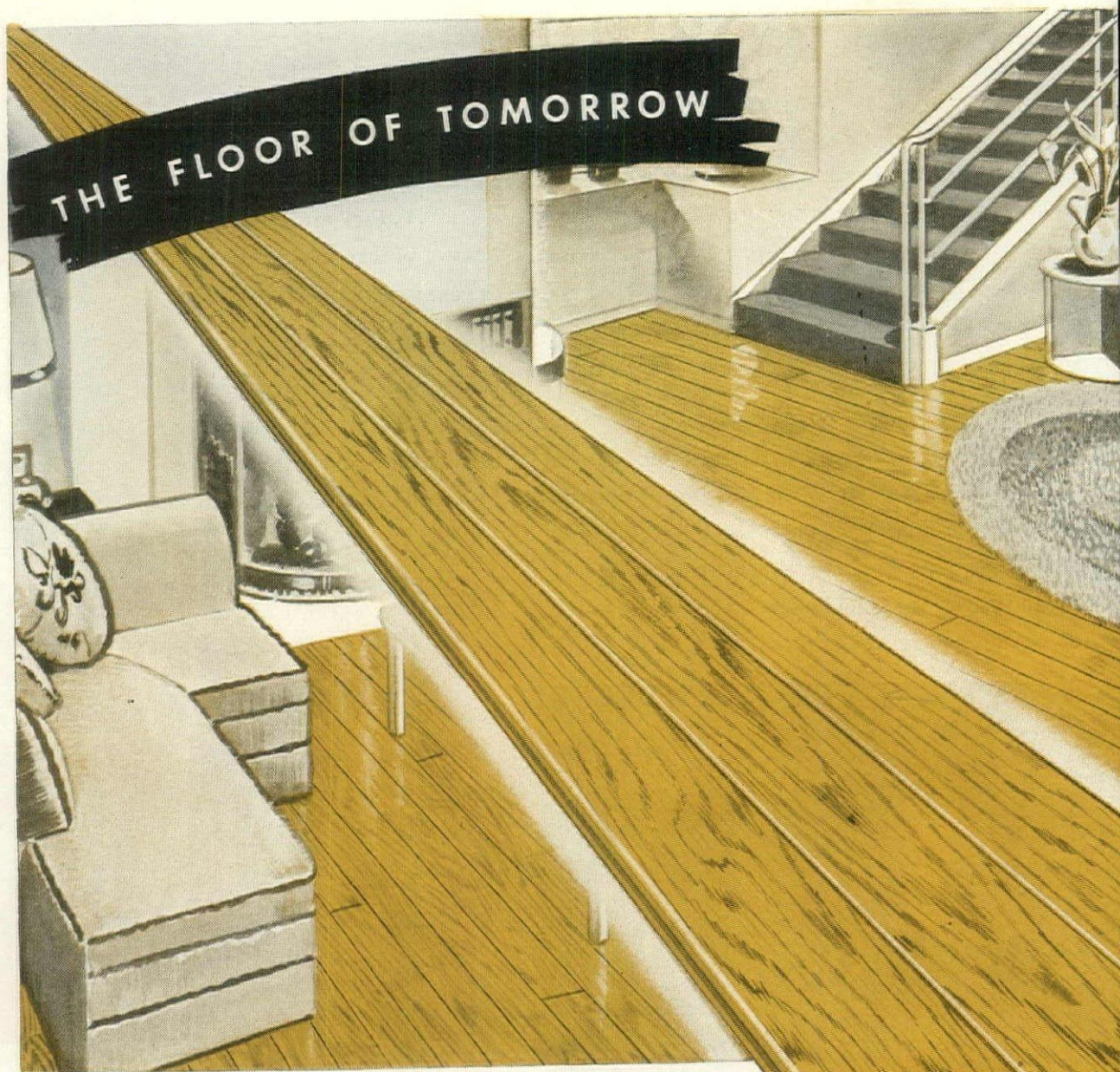
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- 12 Different Grand Master Keys pass 10,000 locks of its individual group but no others.
- 100 Different Master Keys pass 100 locks of its individual group but no others.
- 120,000 Different Change Keys pass one lock only — no others.

Note this is only an example — certain locks may be keyed alike as desired — more or less Master or Grand Master Key Systems may be used.

MASTER KEY SYSTEM	A		B		C		D	
	No. of Key Changes	No. of Locks Controlled by Each Key	No. of Key Changes	No. of Locks Controlled by Each Key	No. of Key Changes	No. of Locks Controlled by Each Key	No. of Key Changes	No. of Locks Controlled by Each Key
Great Great Grand Master Key	1	120,000						
Great Grand Master Key Sets — each set different	5	24,000	1	120,000				
Grand Master Key Sets — each set different under separate Great Grand Master Key	10	2,400	12	10,000		1 120,000		
Master Key Sets — each set different under separate Grand Master Key	20	120	100	100	50	2,400	1	120,000
Change Key	120,000		1	120,000	1	120,000	1	120,000

ALL KEYED UP
and 120,000 places to go

A GOOD RULE

Select your hardware first — then detail to suit it. American manufacturers have standardized to a great degree. By making your details to suit these hardware standards you will *save your clients' money, expedite delivery, and eliminate many aggravating hardware problems.*

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However, keying simplification is always advisable — keying alike does not decrease security, but the more you require in master, grand master and great grand master keying, the more you *decrease* security.

By all means take advantage of keying simplification wherever *convenient for the client* — insuring *protection of property* by eliminating unnecessary or complicated keying wherever possible.

Plan your keying carefully — and call in your hardware consultant for co-operation.

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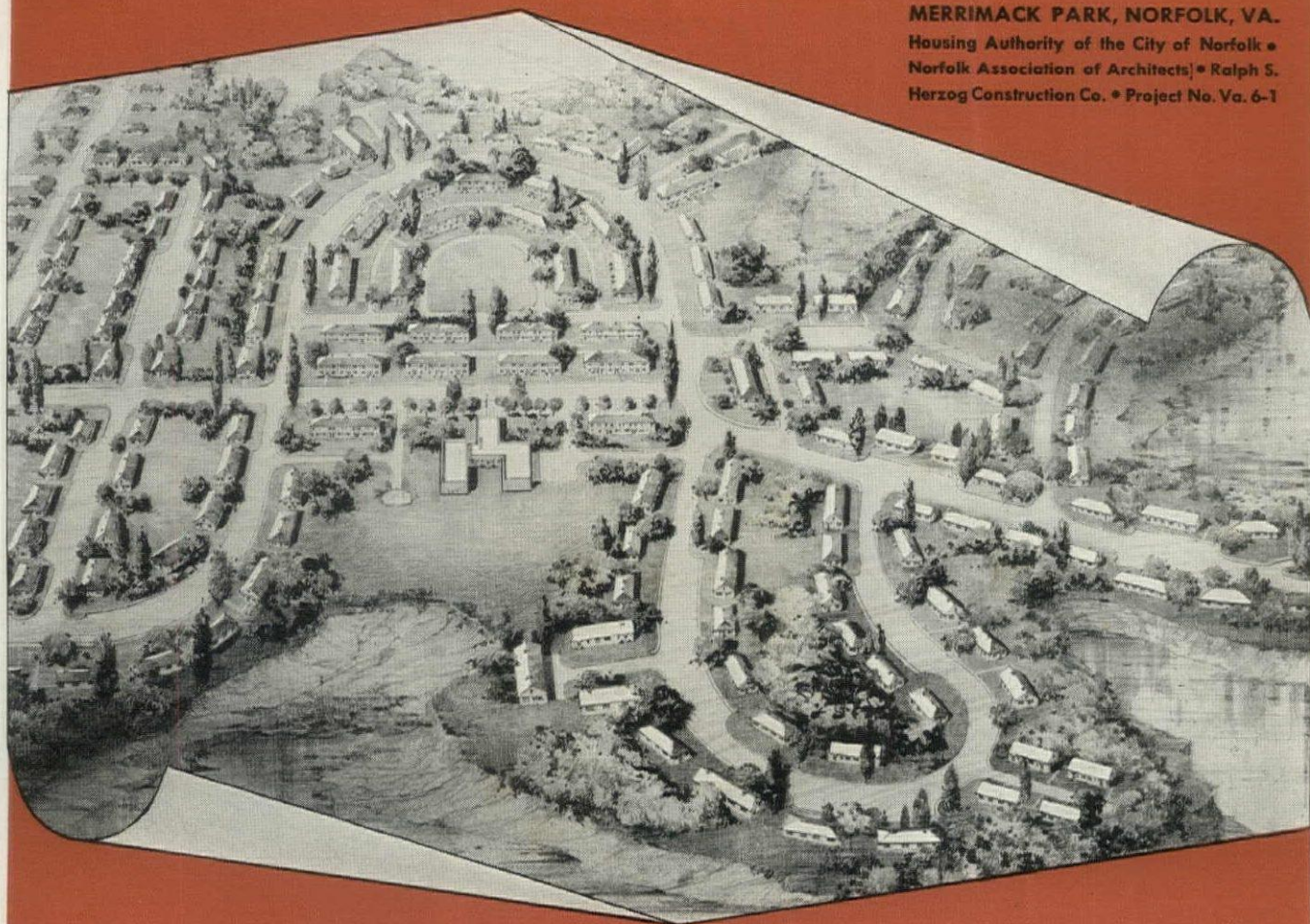
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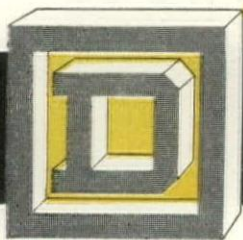
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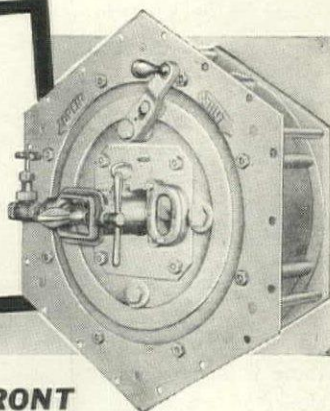
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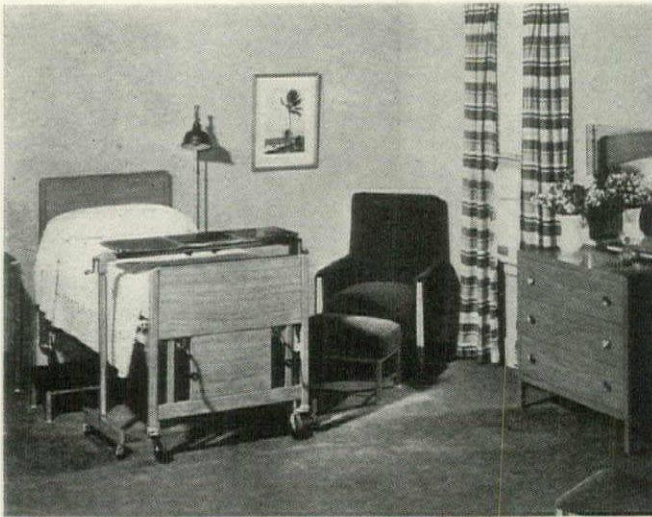
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ON THE FIRING LINE OF AMERICA'S WAR PRODUCTION FRONT

Some practical recommendations for the effective use of color and materials in hospital decoration.



COLOR AND TEXTURE CAN EASILY TRANSFORM BLEAK "HOSPITAL WHITE" INTO LIVEABLE, CHEERFUL SURROUNDINGS

HOSPITAL COLOR AND DECORATION. By Raymond P. Sloan. Physicians Record Co., Chicago. 222 pp. Illustrated. 7 x 9½.

The psychology of color, daily becoming a more advanced and complex science, offers unprecedented possibilities for environmental improvement when applied to hospital interiors. The idea, however, is by no means new. For many years private hospitals have attempted to counteract institutional drabness by introducing colorful touches on the furniture or at the windows. These early efforts were for the most part unstudied and amateurish. Green was favored to the virtual exclusion of all other colors because it was known to have soothing qualities. From a scientific standpoint, little else was known about the spectrum except perhaps that red stood for love and blue for loyalty. More recently science has proved that the psychological reaction to color tones has definite therapeutic value and contributes importantly to the morale of both the patient and staff.

A number of books have been written on this subject, most of them in a highly technical vein. Mr. Sloan, however, approaches the problem of hospital decoration from the design standpoint. He is not a doctor and does not pretend to have any profound knowledge of the medical aspects involved. While his book would undoubtedly be of assistance to some hospital officials, its chief value is as a guide to the architect and decorator.

The author finds three major reasons for introducing color in hospital interiors: 1) for the patient, a less severe transition from home surroundings to those of the hospital, 2) for the public, an appearance that encourages confidence and friendliness, and 3) for the staff, a more congenial atmosphere.

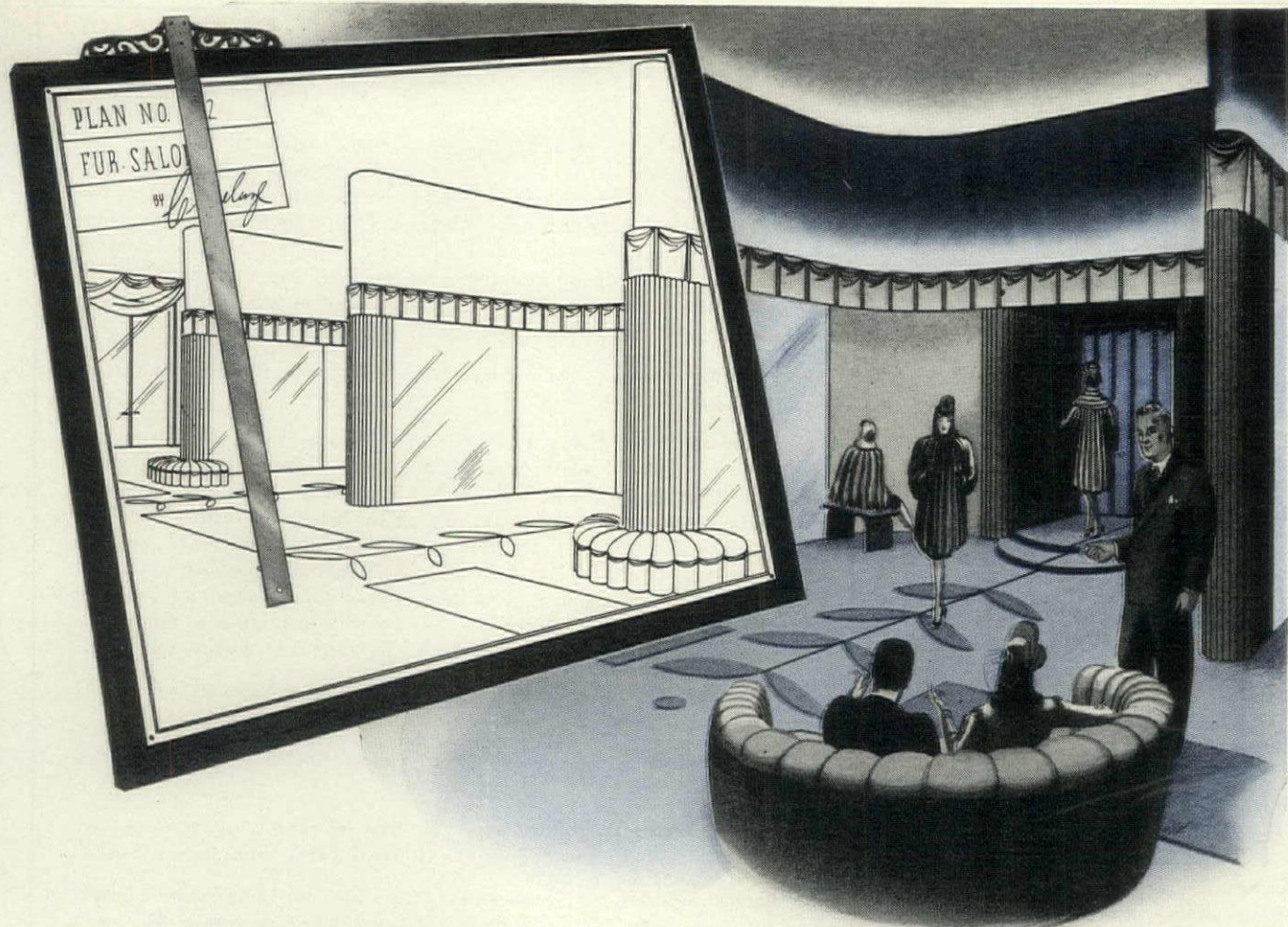
Mr. Sloan's principle recommendations are simply products of common sense. Because of stringent professional requirements and the extreme degree of sanitation required, there is little flexibility possible in either the plan or the choice of surface materials. Effect must therefore be created

by a number of minor adjuncts among which color certainly produces the most significant results.

Simplicity, durability and harmony are three important requisites for every phase of hospital design. Another aspect to be remembered is that all furniture, accessories, draperies, etc., must be interchangeable.

Basing his conclusions on recent psychological findings Mr. Sloan makes the following suggestions for color schemes: "For those rooms in which we serve the patient, we shall hold to light, clear tones. To assist convalescence we shall employ the warmer tones providing greater stimulus; for chronic illness we shall tend toward the cooler tones which are more restful." All of which seems to make sense at a glance. Actually the basis for these conclusions, and many others drawn by the author, is questionable. He admits accepting color expert Faber Birren's finding that the great majority of people, regardless of race or religion, react to the hues of the spectrum in a similar manner. Not mentioned, but seemingly of vital import, is whether or not sick and healthy people react in the same way.

Generally speaking, Mr. Sloan's book contains little more than the ABC of decorating: enlarging the appearance of a small room by using a light tint, the desirability of using warm tones for rooms with northern exposures, the harmony and interchangeability in colors of even value, etc. In texture and pattern, subdued designs and durable materials are suggested. Granting that the author is working in a field where there is little room for creative expression, there is still a marked absence of inspiration. This lack is particularly striking when one stops to consider that he is not hampered by an informed medical viewpoint. Some of the illustrations depict distinctly unfortunate examples of what is being done in hospital decoration. There are also some easily identified fallacies. At one point, for example, Mr. Sloan resignedly admits that in a great many cases existing linoleum or terrazzo floors will have to be dealt with since wall to wall (Continued on page 28)



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More "buy appeal" is the single goal of hundreds of store executives who have commissioned their architects to plan their postwar stores, today.

Consideration for customer comfort is a vital ingredient in such plans. That inevitably means modern air conditioning. In stores that have it, customers will shop at their comfortable leisure, listen more readily to good sales presentations, linger longer, buy more. For those good reasons be sure that

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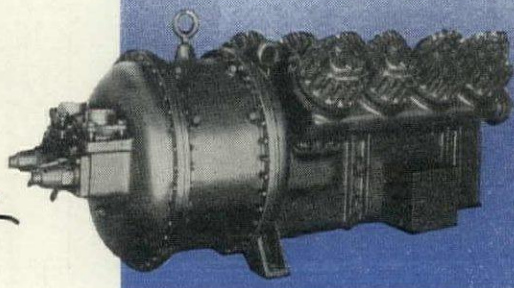
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carpeting is not conducive to sanitation. As an alternate he suggests scatter rugs. It is common knowledge among laymen and professionals alike that no object in a sickroom is more hazardous than a small rug unless it be a banana peel.

As a whole, the book has one great virtue: it makes clear to architects and designers concrete possibilities for improved hospital interiors. Even taking into account the numerous shortcomings, if it contributes anything toward overcoming the sterile monotony of "hospital white"—amen.

THE ENJOYMENT OF THE ARTS. Edited by Max Schoen. Philosophical Library, New York. 328 pp. Illustrated. 6 x 9. \$5.

To provide a means whereby the average reader can orient himself in the realm of art is the purpose of Mr. Schoen's book. In preparing his guide to esthetics the author assembled a series of essays written by prominent professionals in nine fields of art and prefaced them by his own short dissertation on the over-all relationship of art and man. The result is a readable primer which can best be utilized as auxiliary reading matter in the elementary study of art appreciation.

Mr. Schoen, in his introduction, leads the reader gently through an enumeration of the pleasures to be gained through the intelligent appreciation of the arts, analyzes the elements of form and subject, and arrives eventually at the familiar crossroads of art for the many or the few. Logically enough, he finds the cause for this ancient controversy in man's failure to recognize the psychological fact that whereas the need for art experience is present in all human beings, all are not equally susceptible to it. He says, "The truth about art is that there is art for everyone in keeping with the measure of his cravings for esthetic experience. No one has an intellectual obligation beyond knowing his own taste which will prevent him from suspecting the soundness of a taste other than his own." This theme of esthetic self-knowledge on the part of the reader keynotes all the writing, some healthy and encouraging differences of attitude among the various authors notwithstanding. Aside from being sound advice for the novice it is also an acute reminder for some of our more biased authorities.

The late Lazlo Gabor's essay, *Aesthetics in Architecture* proves to be an outstanding chapter because of its lucid explanation and sane evaluation of order. Appreciation of contemporary
(Continued on page 214)

IN THE FORUM

To New Yorkers who consider anyone west of the Hudson a barefoot rustic, Manhattan is obviously the only place in the world

to work, sleep and drink one's lunch. From the superior height of metropolitan existence they gaze across the rest of the country and find it a nice place to visit. This month we decided to turn a probing eye on our out-of-town contributors in an attempt to understand why they have bedded down in the hinterland. Here's the inside dope as revealed by our own Gallup Poll.

Paul Thiry, Seattle: "New York? Sure nice place! But me I like to go nuts quietly."

Harold Spitznagel, Sioux Falls, S. D.: "I walk to my office from the window of which I see no soaring architectural gems but just rolling prairie land unembellished by overhanging smog. When I go home no one stands on my feet the better to scan the adjoining sardine's tabloid. About this time of year I start thinking of those pheasants that have to be shot next month.* In fact with a ten bird limit I'll be busy until next January. The lifelong struggle of the city practitioner to own a farm is not for me, I—pardon the interruption but my wife just called to remind me about those reservations for New York. We just can't wait to get there."

G. McStay Jackson, Chicago: "Would rather be in Chicago because my mother-in-law is in New York."

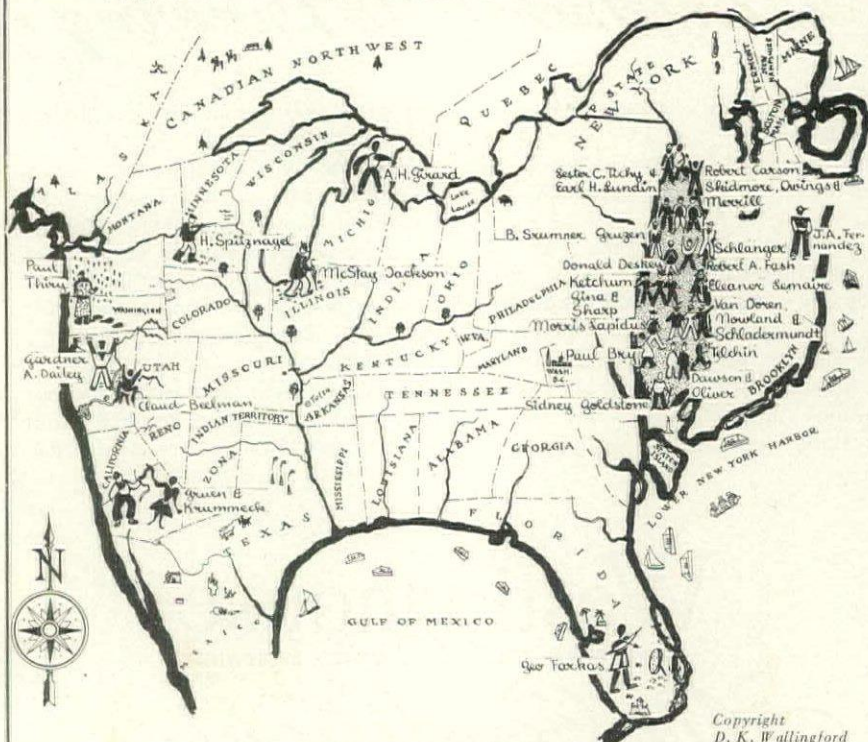
Claude Beelman, Los Angeles: "You wouldn't try to kid a Californian, would you?"

Gruen & Krummeck, Hollywood: "We like New York whenever we are in Hollywood, but gee would we like Hollywood if we were in New York!"

Gardner A. Dailey, San Francisco: "Our atmosphere is pioneer. New York is too effete. Our climate is distilled champagne, while yours is—what a heat! Your past is very degauchir, but the future's just our meat." (Mr. Dailey! Ed.)

Alexander H. Girard, Detroit: "New York is yeast for the loaf, Detroit its dough."

* Cheerful note: WPB now allows 62% of prewar ammunition used for hunting.



THE FORUM'S New York contributors look at the U. S.

Copyright
D. K. Wallingford

FUTURE HOUSING DEVELOPMENTS

RESearch of the Bohn organization will aid materially in developing future housing. An example of a duplex apartment of tomorrow is shown above. Rooms will be flexible—can be made larger by merely pressing buttons. Greater beauty and improved construction will be possible. Homes will be warmer in the winter—cooler in the summer. After the war, the great resources of this company will be at the disposal of the architects and engineers interested in new light alloys by Bohn. These advanced materials undoubtedly will hold first place with many industries in the shape of things to come.

BOHN
BOHN ALUMINUM AND BRASS CORPORATION, DETROIT, MICHIGAN
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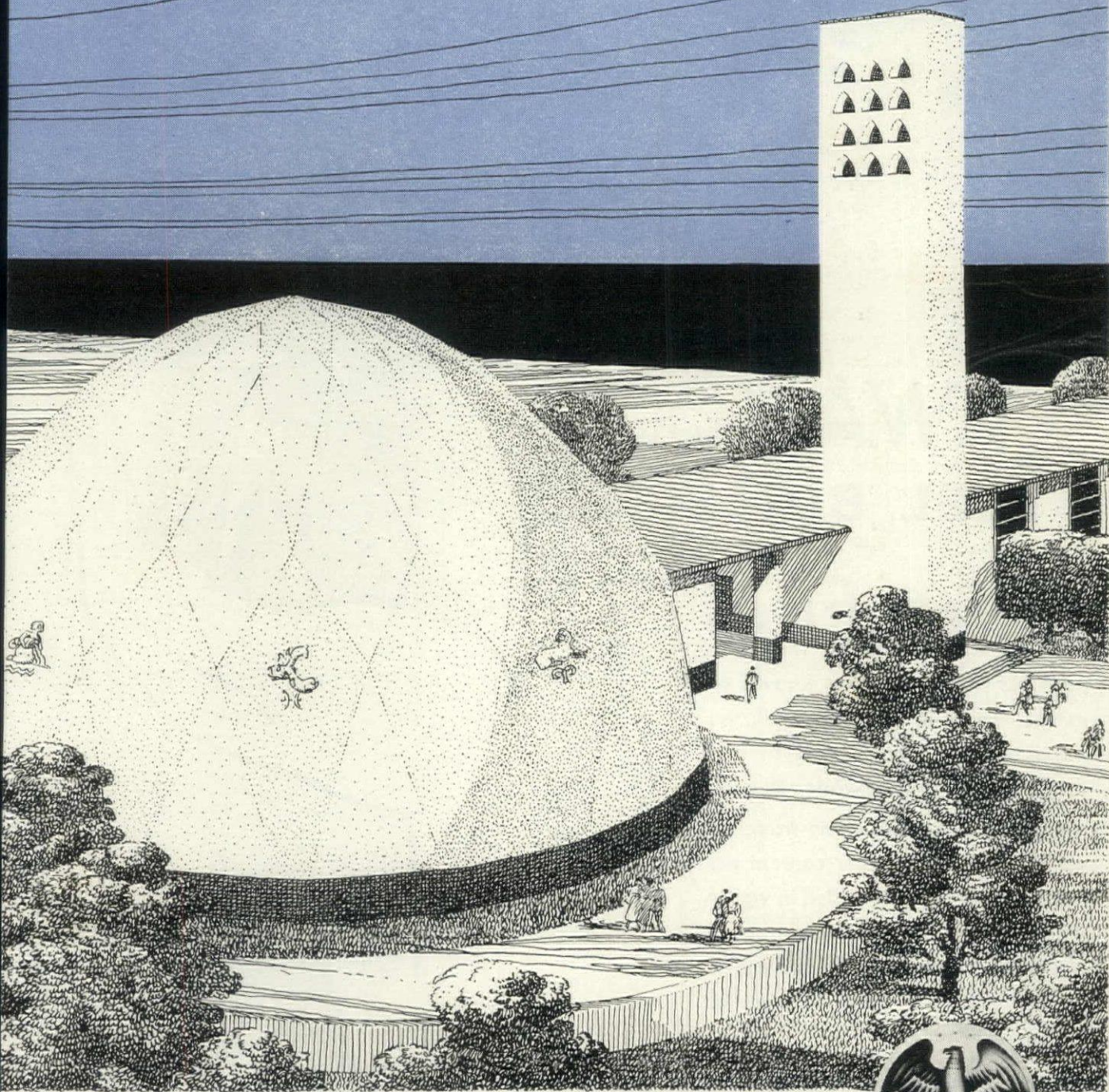
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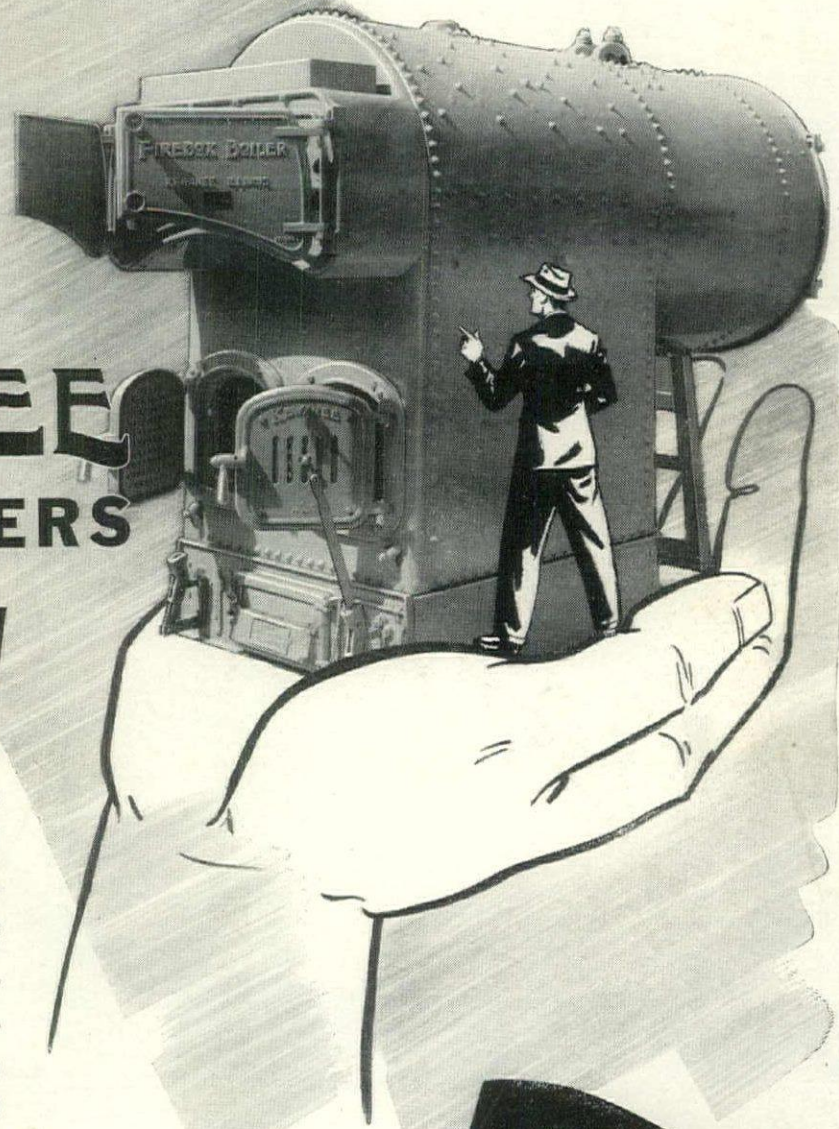
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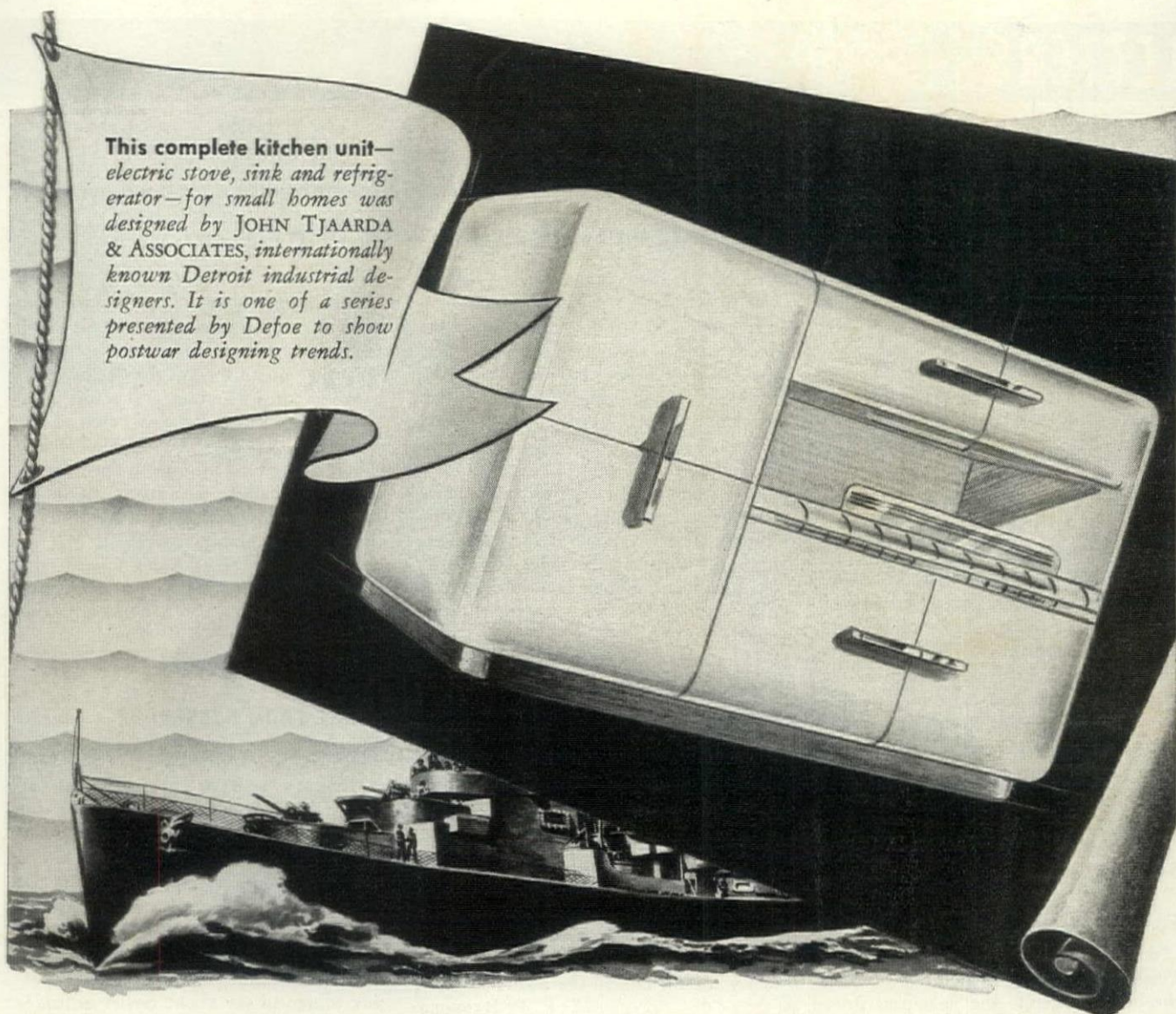
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This complete kitchen unit—
electric stove, sink and refrigerator—for small homes was designed by JOHN TJAARDA & ASSOCIATES, internationally known Detroit industrial designers. It is one of a series presented by Defoe to show postwar designing trends.

ON LAND as on the Sea

The navy-smart air and snug appearance of the prefabricated kitchen unit shown above prove that the space-saving efficiency of marine design is just as effective for homes on land as on the sea . . . Defoe presents this design as an example of how American industry will improve living standards, promote the nation's prosperity . . . and create postwar employment. Today the only thought of nearly 4,000 workers, here at Defoe, is building battleworthy ships for the Navy. But when the Axis is defeated, the same competitive spirit and craftsmanship that have set records in producing for Victory will be reflected in the quality and value of whatever Defoe may build to serve peacetime America.

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Four White Star Renewal Citations now decorate the Navy "E" Award won by Defoe workers.

BACK THE ATTACK
 —BUY WAR BONDS

SHIPS FOR VICTORY
 SERVANTS FOR PEACE

Reactions to "Living Memorials" . . . The layman views modern architecture and a modern architect views the layman . . . THE FORUM's first war correspondent . . . Letter from Italy.

LIVING MEMORIALS

Forum:

Congratulations for raising an issue which must be faced as the war draws to a close. I am looking forward to future articles on "Living Memorials."

HENRY ASPINWALL

New York City

Forum:

Undoubtedly the articles by Archibald MacLeish and Charles D. Maginnis were masterly pieces of prose, but these guys are so philosophical I never did discover exactly what they were talking about. If you print anything more on this subject please give it at least some resemblance to reality instead of allowing the deep and involved brain wanderings which only a professor emeritus could follow.

JOSEPH D. SMITH

Seattle, Wash.

Forum:

Apparently both Maginnis and MacLeish consider useless pieces of statuary the only answer to the memorial problem. To my mind it is nothing short of criminal to spend in this way thousands of dollars which could be better used for needed community projects. Why not print the humanitarian side of the question?

MRS. ALICE DILTER

Indianapolis, Ind.

Forum:

. . . two thoughtful and compassionate pieces of writing. . .

JAMES BERTRAM

New Haven, Conn.

CONDEMNATION . . .

Forum:

So far since I have been getting your magazine the only thing featured has been city planning or box modern: neither of which does me any good.

This is a fine old residential section, with New England houses and nice summer homes. Skyscrapers, city planning and box modern do not come into our picture at all. There is going to be plenty of building here, as soon as the

war is over, and the Yankees and summer people will want to introduce the good features of the modern into their homes of tomorrow, but they will want to do it without losing the charm that has long been manifest in New England houses.

To date I have seen no example of a modern home with architectural charm—exterior, I mean. Some of the interiors show charm in spots. The skyscrapers have it. Some of the new city blocks have it. But the home continues to look like an amplified orange crate with innovations.

What the future generation of home builders will want is the light, the convenience, the atmospheric crispness and simplicity of the modern combined with some of the grace of the 18th century.

ANN HICKOX

Westerly, Rhode Island

Forum:

. . . Your super-colossally ultra modern small house designs leave me cold. Modern conveniences can be incorporated into homelike homes. So far, I feel you have missed the boat.

E. P. RADFORD

St. Petersburg, Fla.

. . . AND REBUTTAL

Forum:

Receiving your May issue of THE FORUM was literally a shot in the arm. It is an inspiration to know that there still is such a thing as architecture left in the world. A welcome thought after a few months spent in Quonset Huts—be they ever so blessed for their purposes.

Interesting to note was the reaction of the "layman" to modern architecture pictured therein. Typical remark by fellow officers "Here is that book with those crazy houses in it." Such is the situation here as faced by two young "ex-architects." Is not this complete lack of understanding representative of those who are returning home purportedly to rebuild the world? These same people are inclined to ridicule English worship of the old and the traditional, to hold up to the English American ideas of advancement and achievement. Yet when the design of their own homes is concerned they do not think beyond

grandfather's house. But they want all modern conveniences and ideas (such as large windows and areas) no matter how incompatible with the "crib."

The architect's greatest postwar problem will be rather hopeless; that of trying to educate the vast, architecturally illiterate public in time to prevent in the postwar haste the large scale building of already antiquated structures—prefabricated or whatever.

Is anything being done now to educate the layman?

RODNEY S. DAVIS

*Fleet Post Office
New York, N. Y.*

CABLE FROM HERSEY

Forum:

Russia's postwar planning has already begun. I have material on the reconstruction of Leningrad as outlined by Leningrad's chief architect, Baranov. Leningrad is a rather special case in Soviet reconstruction because the city is monumentally beautiful and almost chauvinistically conscious of the beauty. Baranov also had some interesting things to say about Soviet attitudes on modern architecture. As ARCH FORUM's first war correspondent (to my knowledge) I have already taken the liberty of translating the Soviet war correspondents' song about the terrible hardships reporters go through to get material back, with the chorus as follows: "But early in the morning—were printed right on time—ARCHITECTURAL FORUM, FORTUNE, LIFE, and TIME." This is already being sung in English by Russians who said they love to roll out that third line, so you see, ARCH FORUM is achieving a certain limited fame in these parts.

JOHN HERSEY

Time Inc. Moscow Bureau, Russia
Correspondent Hersey (author of *A Bell for Adano* and *Into the Valley*) has been cabled to rush his material.—Ed.

KILLAM AGAIN

Forum:

In the July, '44 number of the *Journal of The American Institute of Architects*, David H. Morgan makes an oft repeated misleading statement which should be

(Continued on page 36)

PROBLEM :

Design and installation of a new ceiling in the lounge of an exclusive men's club. Plaster had fallen as shown below, narrowly missing one of the members. A permanent ceiling in keeping with interior is desired.

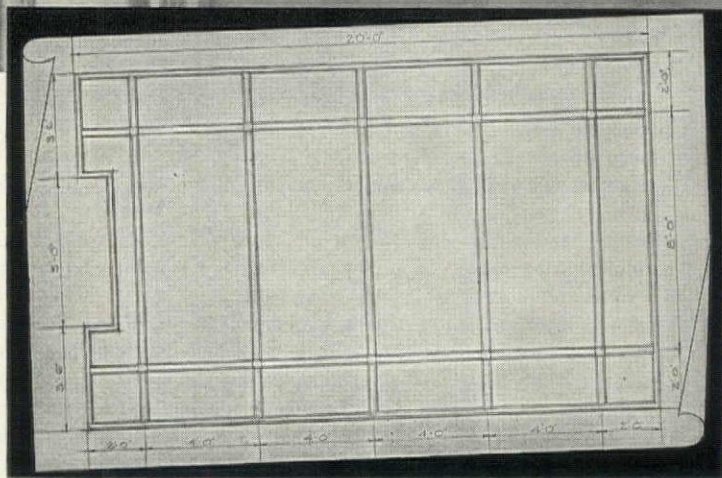


SOLUTION :

Furring strips were applied directly over old plaster and bare lath. Upson Floating Fasteners were nailed to furring strips to anchor Upson panels securely from the back. No nailing is visible. Upson Shad-O-Line Mouldings with recessed edges provide a striking light and shadow effect, eliminating the possibility of a broken paint line.

Result: A permanently beautiful *crackproof* ceiling in two days time without the mess, dirt and delay of replastering—*plus* a satisfied customer.

The use of Upson Panels affords wide opportunity for improved ceiling design in keeping with either conventional or modern interiors. Pebbled and presized, they have an ideal painting surface. Installations have been



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If desired, a representative will call to render any needed assistance upon similar problems. *The Upson Company, Lockport, New York.*

Upson Quality Products Are Easily Identified By The Famous Blue-Center

UPSON

CRACKPROOF CEILINGS OF ENDURING BEAUTY

LETTERS

(Continued from page 34)

contradicted. He says: "Further, the real slum-clearance projects of the public housing program, have very substantially, if not wholly, eliminated the social and anti-social city costs, and the housing authorities are paying into the city treasuries amounts equal to or greater than the city's costs of furnishing the customary city services (street cleaning and lighting, garbage collection, sewer service, police patrol, etc.) to the slum clearance area." He does not say that some projects are making no payment at all.

In addition he, like many other public housing advocates, leaves out the most expensive services, services which are not reduced at all by new projects. In connection with the other items, can Mr. Morgan give us examples of a significant number of cases (not just one favorable case), which show reductions in public works, police, and fire department personnel due to the building of a housing project?

The annual report of the USHA for 1939 shows the pitifully small payments in lieu of taxes on different PWA projects, in some cases nothing at all. A housing project does not eliminate poverty nor does it raise wages.

The magnitude of this discrimination against the private owner is entirely inexcusable, particularly when we consider that his house is not new and that it probably has far less light, air, and modern conveniences than the new project housing.

It is to be hoped that architects will not give any blanket approval to any more subsidized housing until the U. S. Housing Act of 1937 is radically amended to require more direct and more easily understandable financing for much shorter periods than 60 years, with revised and more flexible standards, with more consideration of the low-income family whose earnings are a little too much for admission to a project, and with some consideration of the size of the national debt.

CHARLES W. KILLAM

Cambridge, Mass.

WITH THE ARMY

Forum:

I have learned the meaning of the word "tenacity." While a civilian in Chicago and later as a soldier in Washington, D. C., I had taken the FORUM for granted along with the rest of what was a rather luxurious mode of life. Now, down here in this post, I have learned what it means to get along with

(Continued on page 182)

A LETTER FROM THE PUBLISHER

Dear Reader:

Within the comfortable memory of this gaffer it was commonplace for the entire editorial staff to put aside work on the next issue to figure out the right answer to some reader's inquiry. Sometimes, the question really was tough, other times it presented some particularly intriguing problem (how to build a screened sleeping porch on a half-timber house without sacrifice of its "authentic" appearance?) A few of these each month would keep the boys and girls up at night and harass eager subscribers who had to wait an extra day or two for their FORUM.

Now the monthly questions run around two hundred. Most of them are answered within twenty-four hours, all of them are answered authoritatively—and until they are answered they are rarely seen except by the one person on the staff who handles them all. So there, Mr. Fadiman.

Perhaps you will assume that we use radar or that we have uncovered a new triumph of the machine age. Actually we have made an equally important discovery—we have found Henry Martin, about whom more in a moment. But first let us show you the Martin technique at work.

A Consulting Engineer asks for "a list of metal products used in the past in home and industrial construction and the approximate yearly sales of same."

A Mayor in Illinois wants "plans and descriptions of an Old Folks Home".

The wife of a Medical Officer overseas, who apparently intends to stay there, wants picture of a two-story building, suitable for a corner lot 55 x 64 to be built in the tropics and used as a doctor's office.

The Society of Architects of the Republic of Poland wants material on libraries, picture theatres and recreation centers (this, sir, is the brave new world).

Henry's latest prize is a letter from 10 Downing St. (see cut) which actually came with the ordinary mail.

Naturally, the Services are heavily represented. From corporals to colonels, from Attu to Australia, comes a flow of mail to prove that it takes more than foxhole discomfort to make a building man turned soldier keep his mind completely off his business or profession. The Letters



10, Downing Street,
Whitehall.

12th August, 1944.

Dear Madam,

I am writing on behalf of the Prime Minister to thank you for your letter of the 10th July, and the enclosure.

Yours truly,

G. W. Martin

Miss Henry T. Martin.

in Uniform cover everything from prefabrication to "what's being done about postwar planning—and why not?"

Which brings us right back to where we came in—the boss of the Letters Department. Henry didn't just fall into the FORUM niche. Long experience in the architectural publishing field—not to mention researching the Museum of Modern Art's now famous pamphlet on modern architecture—served as limbering up exercises for present brain-twisters. Having such a background, no situation can baffle our paragon. Without shame, we just filed an example from the bulging files. At least we had the good taste not to look up what came before.

From an army camp:

"Thank you so much for the extensive information. I certainly appreciate all the trouble you went to in securing it. Thank you also for not trying to leave me in the dark about your name. Where in the world did you get that handle? Not that it doesn't sound nice, it's only that it's so very masculine. Are you what it implies? (Excuse the familiarity, but you must know by now what soldiers are like).

Cordially yours,

—, Cpl."

"Alas, my name doesn't quite suit me. Fortunately or otherwise, it was a legacy from my father, to whom, I am afraid, I was a great disappointment.

Cordially yours,

(Miss) Henry Martin"

P. S. She wasn't.—Ed.



Architect: DONALD BEACH KIRBY, A.I.A. Builder: ALLISON HONER

Contemporary American Home of the MAHARAJAH OF INDORE

When Sir Yeshwant Rao Holkar, Maharajah of Indore, planned this home at Santa Ana, California, he could, of course, command the best in equipment. That he chose PAYNEHEAT upon the advice of well-informed American friends and technical experts, is, we feel



a tribute to PAYNE quality and performance. ★ Tens of thousands of other homes . . . from humble cottage to great mansion, coast to coast . . . enjoy PAYNE heating and ventilation . . . assured of carefree comfort for the duration and many years to come.

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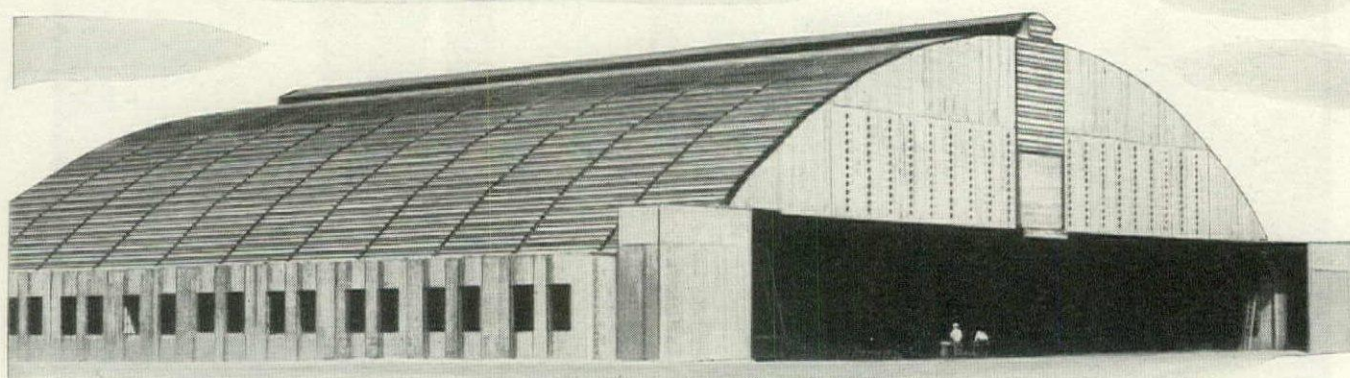
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Payne FURNACE & SUPPLY CO., INC., BEVERLY HILLS, CALIFORNIA

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This partly finished steel hangar at the National Airport in Washington, D. C., shows one wartime use of ARMCOS STEELOX panels. The panels are bolted to the top chord of pressed metal arches to form the roofing and siding for the hangar. U.S. Army Engineers did the grading, built the concrete footings and paved the floor. The building was designed, manufactured and erected by Armco.

You can save construction time in post-war houses and other structures by using STEELOX floor-ceiling panels.

These interlocking units do *two jobs at once* by making a firm base for sub and finish flooring on the upper side, and a complete, ready-to-paint ceiling on the lower. Two men can lay 20 square feet in three minutes.

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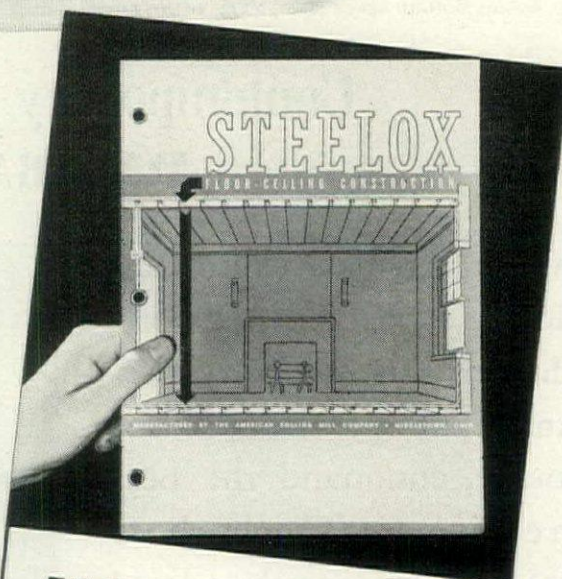
You can have the same advantages in the commercial buildings you design—for floors, walls, roofs and partitions. STEELOX panels have been used successfully for more than 10 years, and have the complete approval of structural engineering firms.

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You can use these practical ideas for design and construction of many types of buildings. Write for a free copy on your business letterhead. The American Rolling Mill Company, 2871 Curtis St., Middletown, Ohio.

Special Purpose Sheet Steels FOR TOMORROW'S BUILDINGS

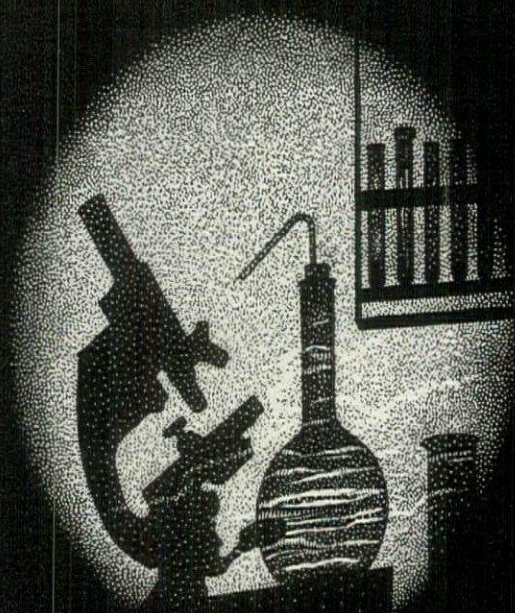


**"— Say, this guy
offers Post-War
Plans by the foot!"**

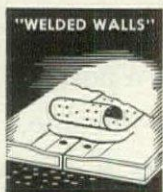
Hold, it friends. Your correspondent isn't nuts. He's an authorized Kentile contractor and that proves he's a responsible citizen and the best floor-man in town. He's merely raving about Kentile and he means that a new Kentile floor installed now will be a *permanent* improvement in any interior. He's probably getting excited about the brilliant, modern color combines and the patterns you can devise with Kentile (set by tile, instead of in sheets). Or he may be pointing out that no one can imagine a post-war improvement on Kentile—the super-durable, resilient floor that resists all stains and is so easily cleaned that any untrained employee can maintain it. Actually there are 14 advantages to Kentile, all told. Do you, for instance, know about Greaseproof Kentile? For improvement right now or surefooted planning, learn all the facts. Consult your local Kentile contractor. To learn his name write to David E. Kennedy, Inc., 58 2nd Ave., Brooklyn 15, N. Y.



How Research Bumped Into a Blank Wall



SHEETROCK *Fireproof* WALL AND CEILING PANELS



Did U.S.G. Research Men reach a "dead-end" when they came face to face with a blank wall? . . . Not at all, because that's exactly what they set out to find . . . a system that combined Sheetrock* wall and ceiling panels into one continuous surface . . . where joints became notably conspicuous by their absence.

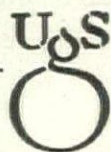
The advantages of Sheetrock fireproof wall and ceiling panels are well known. With their use, interiors go up on the "double-quick" . . . no waiting for decorating—wood trim may be ap-

plied immediately. These points have been demonstrated through twenty years and more of use.

The treatment of the joints was the one remaining problem to be solved. That became a thing of the past with the Perf-A-Tape* System of Joint Concealment . . . not only are joints concealed but "welded" together so securely that the joints are stronger than the Sheetrock panels themselves.

Continual research and new developments, proved in practice with an eye to the future, have kept Sheetrock well in the lead, as the most widely used gypsum wallboard in the world.

*Trademarks Reg. U. S. Pat. Off.

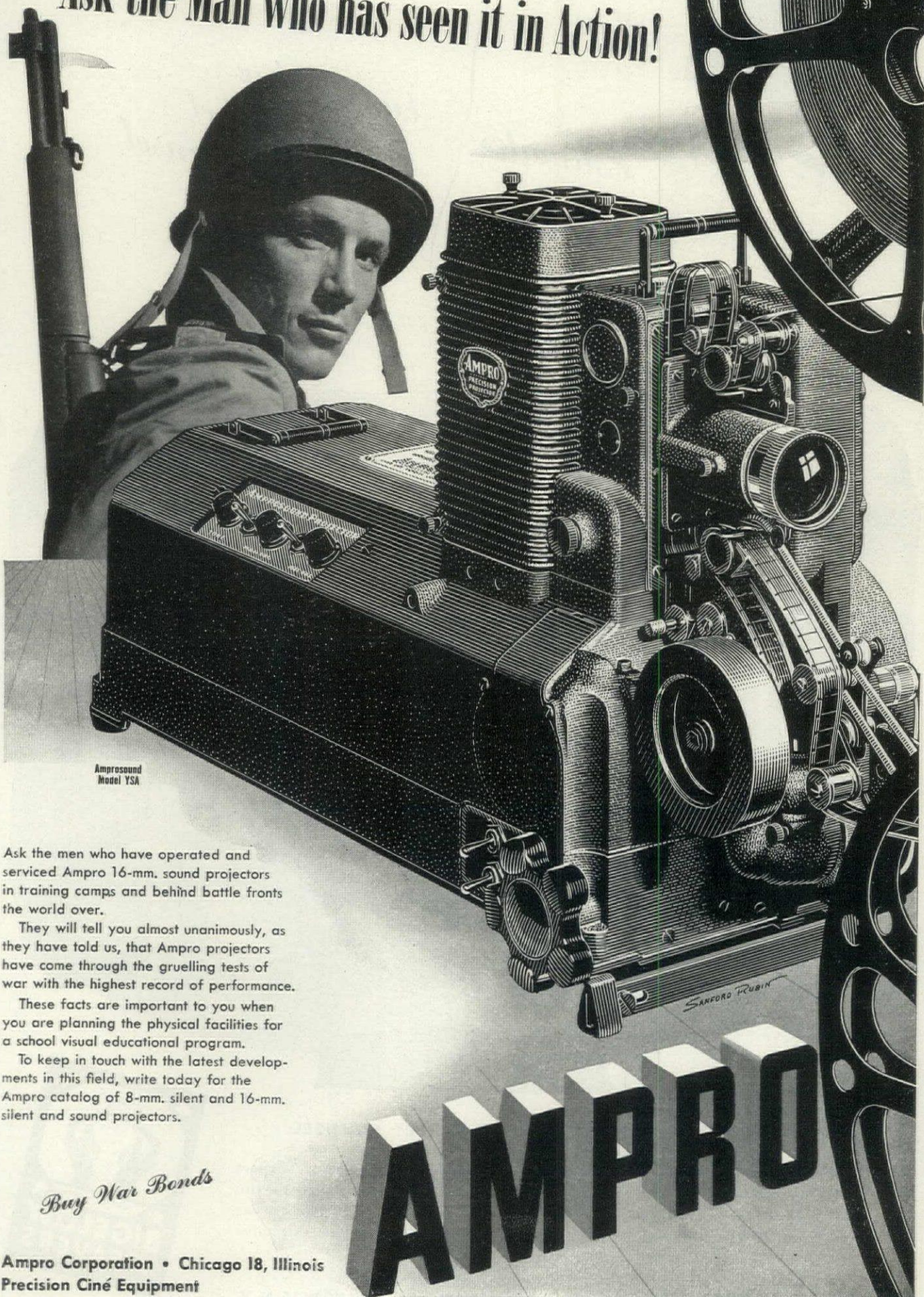


UNITED STATES GYPSUM

Manufacturers of Building and Industrial Products Since 1901

GYPSUM • LIME • STEEL • INSULATION • ROOFING • PAINT

Ask the Man who has seen it in Action!



Amprosound
Model YSA

Ask the men who have operated and serviced Ampro 16-mm. sound projectors in training camps and behind battle fronts the world over.

They will tell you almost unanimously, as they have told us, that Ampro projectors have come through the gruelling tests of war with the highest record of performance.

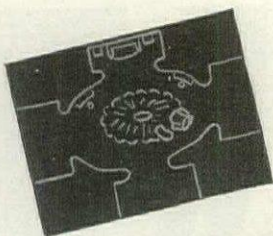
These facts are important to you when you are planning the physical facilities for a school visual educational program.

To keep in touch with the latest developments in this field, write today for the Ampro catalog of 8-mm. silent and 16-mm. silent and sound projectors.

Buy War Bonds

Ampro Corporation • Chicago 18, Illinois
Precision Ciné Equipment

AMPRO



ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
1-101	1-102	1-103	1-104
1-105	1-106	1-107	1-108
1-109	1-110	1-111	1-112
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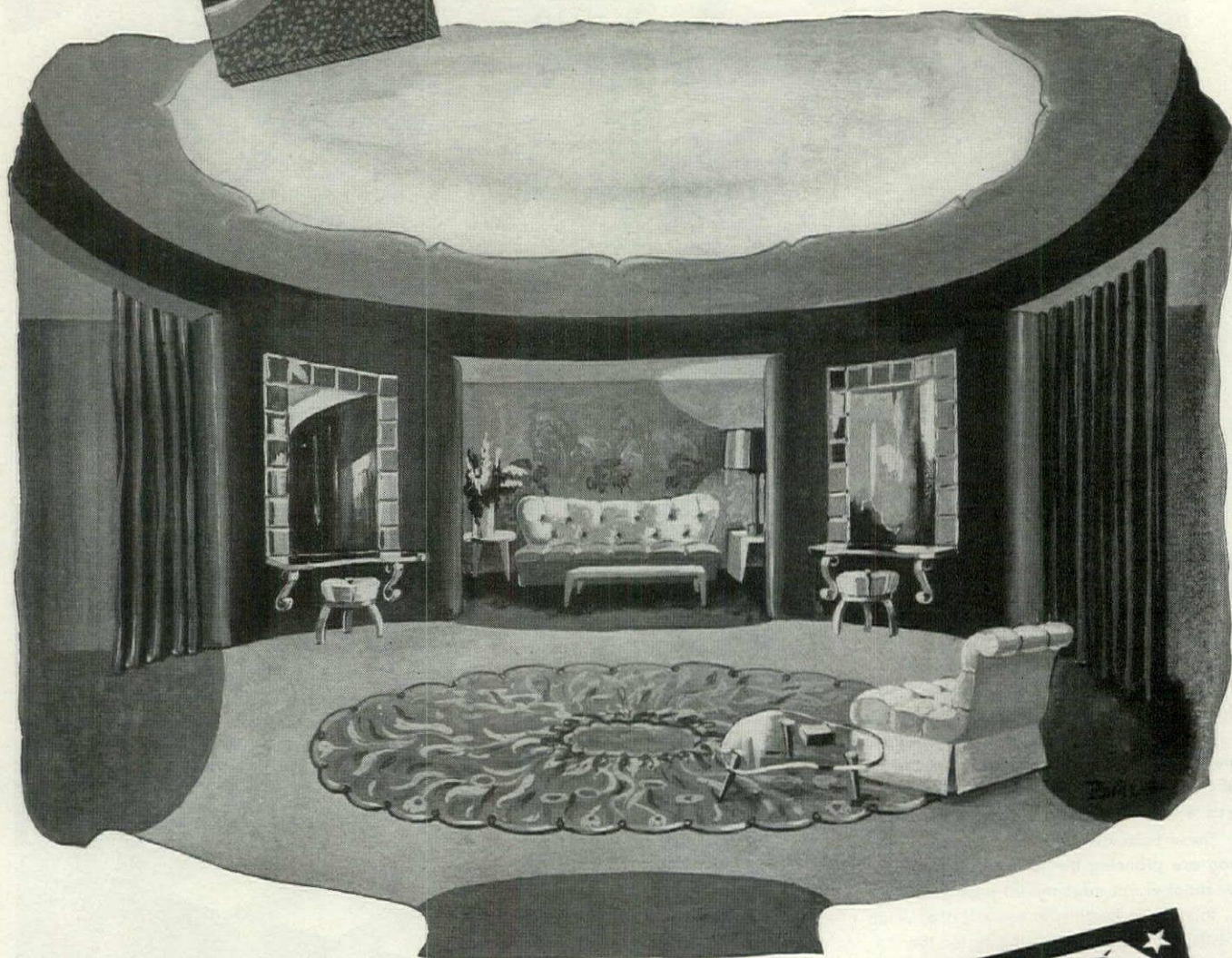


Plans

Estimates

*by Bigelow
Carpet
Counsel*

Designs

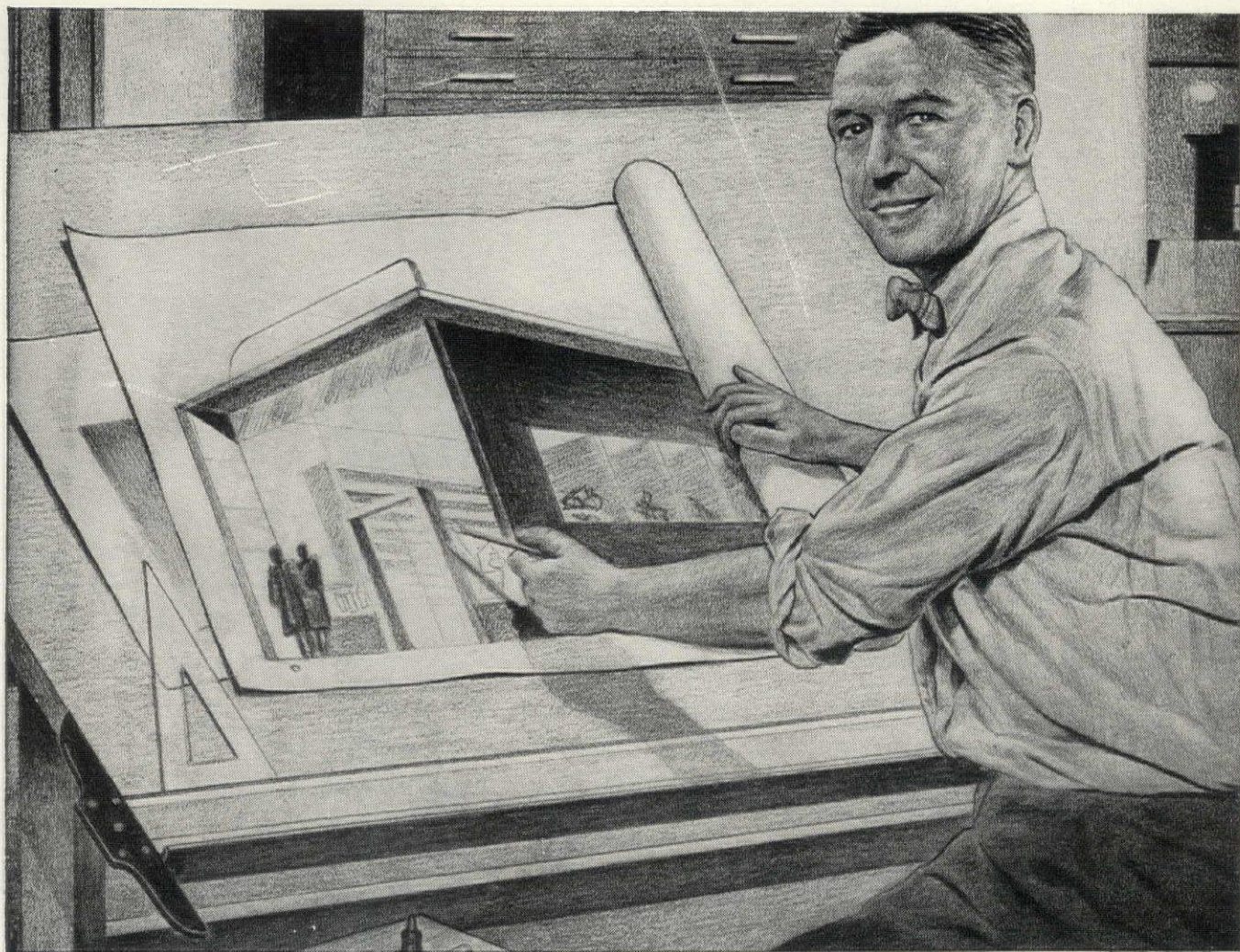


PLAN FOR A FOYER BY BIGELOW CARPET COUNSEL

Here's the money saving way for your after-the-war carpet installations. Get expert advice and counsel on the right colors and designs for the right spaces—the right texture and quality at the right price. Carpet Counsel means wear surveys—It means a big extra service, through your dealer, of plans, estimates and designs at no extra cost.

BIGELOW-SANFORD CARPET CO., INC., 140 MADISON AVE., NEW YORK 16, N. Y.





“ON REMODELING JOBS I ALWAYS CHECK AIR CONDITIONING”

TODAY, plans for the modernization of literally thousands of commercial buildings are on the drawing boards of architects and engineers.

Air conditioning figures largely in those plans. For the new air conditioning units and equipment now under consideration will bring new store comfort and merchandising efficiency.

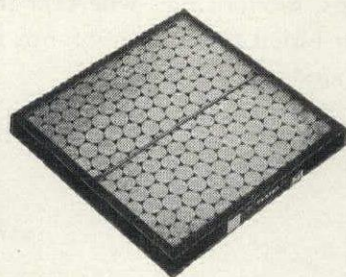
Dust-Stop* Air Filters will be an important part of these new air conditioning systems.

Before the war, design engineers in

air conditioning had included these filters in systems installed in theaters, office buildings, hotels and many industrial plants. Dust-Stops have found an even wider acceptance during the war in providing controlled, dust-free conditions in all types of buildings.

So, in considering remodeling plans for your clients, investigate the efficiencies, flexibility of design application and the ease and economy of this inexpensive, replaceable air filter. For further engineering data, get in

touch with your air conditioning equipment manufacturer, or write *Owens-Corning Fiberglas Corp., 1913 Nicholas Bldg., Toledo 1, Ohio; in Canada, Fiberglas Canada Ltd., Oshawa, Ontario.*

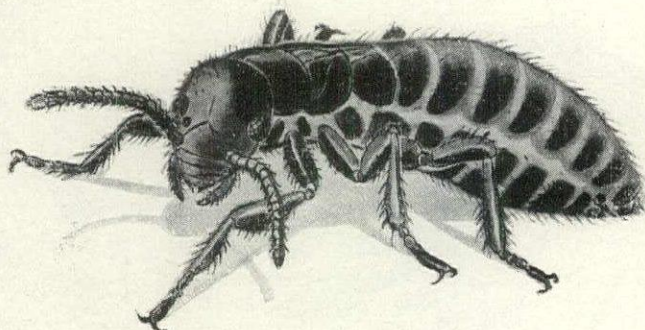


FIBERGLAS*

DUSTOP

AIR-FILTERS

*T. M. Reg. U. S. Pat. Off.



THE BUG THAT FOLLOWED A TREE FROM THE FOREST

Termites were once practically unknown to people who lived in houses. But that was because the termites thrived in forests, where there was an abundance of wood to feed on. As many forests were cut down, termites searched elsewhere for their natural food. Today termites may be found almost anywhere in beams, joists, porches, steps, subflooring—wherever they can build their tubes from the ground to reach wood.

But termites *need not* be dangerous. Any structure can be protected from termites through use of wood treated with Du Pont Chromated Zinc Chloride. "CZC" treatment makes wood unattractive to termites, fending off their destructive invasions.

This protection is only one of "CZC"'s benefits. "CZC" treatment also gives wood measurable fire retardance and decay resistance. It gives you wood that is odorless,

clean to handle, and paintable.

Without sacrificing any of wood's natural, age-old advantages, you can give your buildings additional long life, safety and low maintenance costs by specifying "CZC"-treated wood. Bear it in mind for today's work and for the many big jobs that will cross your boards later on. E. I. du Pont de Nemours & Co. (Inc.), Grasselli Chemicals Department, Wilmington 98, Del.

Let's All Back the Attack!

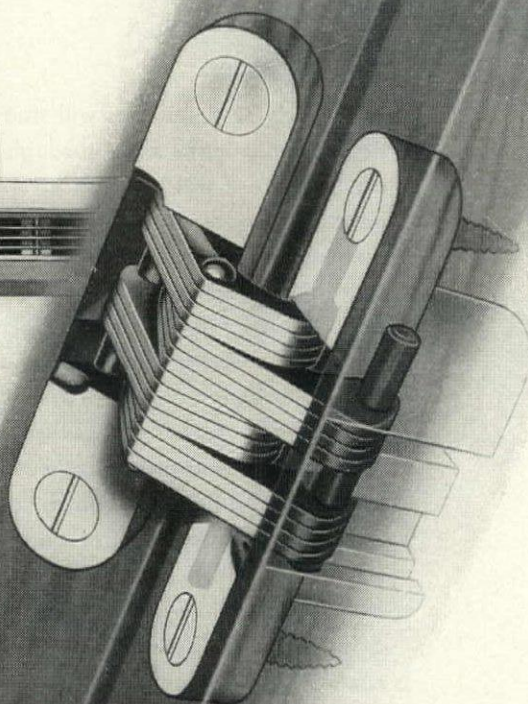
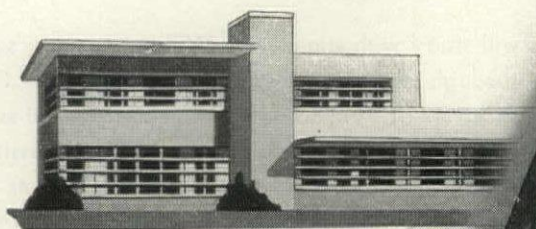


BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

DU PONT CZC

CHROMATED ZINC CHLORIDE

Makes Wood Resist Decay—Repel Termites—Retard Fire



a necessary feature for tomorrow's home

THE HOME OWNER of tomorrow will demand every modern feature which enhances pride of ownership. Certainly he will insist upon the ultra-modern detail that permits the flush, unbroken interior surfaces provided by SOSS INVISIBLE HINGES.

No longer need surfaces be marred by those unsightly gaps and projections wherever hinges are necessary. Soss Invisible Hinges are out of

sight when the door is closed. The use of Soss hinges beautifies doors, cupboards, folding partitions—and widens the opportunity for modern, unusual design. Write for full details.

SOSS MANUFACTURING COMPANY
21767 HOOVER RD. DETROIT 13, MICHIGAN



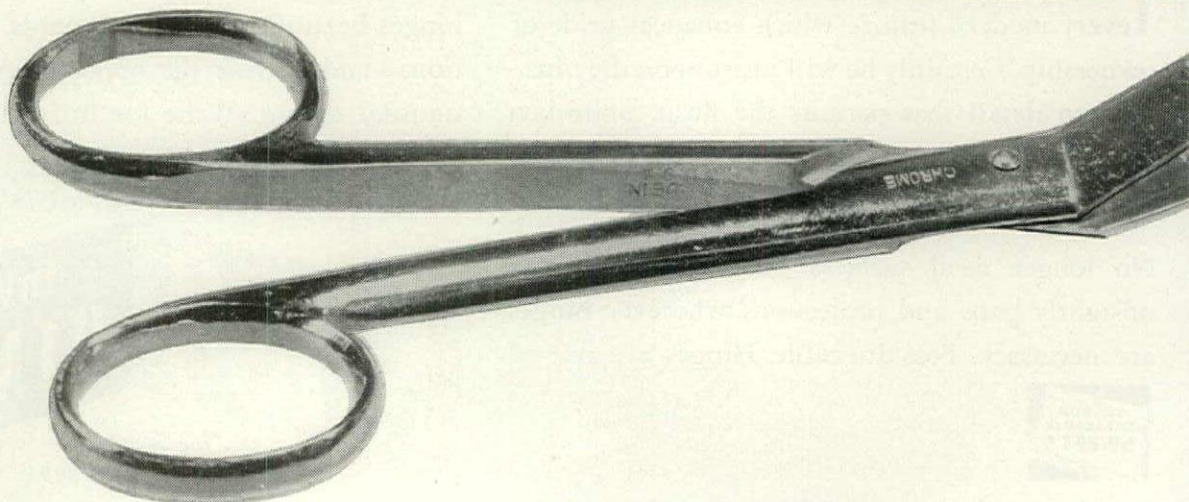
Sure Surgery for Sick Slums

Thousands of Americans will study with stimulation William Lescaze's proposal to eliminate slums through building groups of "superblocks." Quite possibly there will be differences of opinion as to some details. But surely nobody can object to Mr. Lescaze's basic contention as to the necessity of freeing increasing millions of Americans now penned up in slums and providing them—at a minimum rental with "sun, air, space, in ample proportion for the enjoyment of life."

In presenting the ideas of various distinguished architects and designers for the improvement of post-war living, Revere feels it is doing a public service if it be only to animate discussion both within and without professional circles. But it feels also that the whole post-war building industry must benefit: architects, builders, contractors, realtors, manufacturers and financiers.

And in stressing copper and copper-base alloys—their durability and beauty—Revere is only again emphasizing that their use makes any building better to live in—easier to rent or sell. After Victory, Revere will offer improved building materials such as roofing, flashing, pipe, tube and architectural shapes.

Revere will be glad, without obligation, to work with post-war building planners and share its fund of technical information. Address: Revere Copper and Brass Incorporated, 230 Park Avenue, New York 17, N. Y.





Uplifting the downtrodden

The greatness of America has been that it sets men free.

And yet, today, in our slums we are penning increasing millions of Americans, and so confining their spirit. In every major city in America there are areas where the phenomenal growth of industry and population has made it impossible for any facilities to keep pace with even minimum requirements. Unbelievably crowded in these areas, men and women accelerate still more the ruin of their surroundings. And, as though in revenge, the surroundings in turn brand them, tread them ever further down.

The task of rehabilitating such areas is always delayed by the seemingly superhuman effort it would take. But that is wrong. Because I know it is wrong, because I know that by freeing the slums, we will also free the minds of those who dwell there, I have prepared a complete plan by which whole districts can be rebuilt gradually during the generation following the war.

And this plan can be adapted to all kinds of varying localities.

The primary approach of the development is the consideration of human needs—sun, air, space in ample proportion for the enjoyment of life. But next in importance comes the necessity of keeping costs down so that families in the lowest income brackets



could live there. The result is a group of "superblocks" which the cooperation of private groups and public agencies could erect—which could be retired in 50 years—housing of post-war standards at an average monthly rental of \$11.75 per room on the basis of costs in New York City.

The principle which makes this economy possible is the reduction of the average exterior wall per room and the increase of the percentage of living space to total space. Each apartment has a balcony, cross ventilation, an interior bathroom, ample closets, minimum waste space. And, above all, each is planned not on the basis of today's formulas, but of tomorrow's needs.

By means of the superblock technique, the community is kept open; the park in which each rises is continuous; sheltered walks and loggias are provided; the sickens of slums can be cured; and men whose heads are bowed can once again lift up their eyes.

The maps, charts, photographic exhibits and sample brochures of this entire project are included in the brochure which Revere has prepared for distribution to those interested in redevelopment. If your city suffers from congested slums, if you would like to study a possible solution, let me suggest that you send for it.

WILLIAM LESCAZE

This advertisement appears in Saturday Evening Post, September 16, 1944

Mr. Lescaze in his "superblock" planned with particular care obsolescence factor. In these buildings, the kitchens and bath plumbing systems, must be at concrete that will house these products used in them, the service they give will be, F permanence.

That is why his plans an option of copper and brass //

To give the full details of Mr. Lescaze's project, we have prepared a illustrated booklet. We will give it to you FREE. Just address it below:

BUY MORE WAR BONDS

REVERE
COPPER AND BRASS
Founded by Paul I
Executive Office: 230 Park A



Copper does not wear out. It is ageless

Revere does not build houses. It does not plan to erect "superblocks". In present-day America, the need for housing is more than a score of others. Before, we are merely endeavoring to make a contribution to post-war living. Yet we must acknowledge one fact—we know that if our hopes for better low-cost housing come true, the use of copper must increase. For the builders of tomorrow will not be satisfied with the flimsiness that typified so many pre-war homes. Whether we turn to prefabrication or de-lasting value, permanence will be the new standard.

And copper is the metal of permanence. It does not wear out. It is ageless. Whether you are a "city planner" or simply a home-owner, we would like you

to think of Revere copper not merely for the new buildings or the new home you dream of, but to rejuvenate or embellish and to enhance the value of existing buildings. For Revere copper and copper-base alloys can provide long-lasting weather protection; they can decrease heating costs and produce sun-free water; and many architects use them not only to make buildings better, but to make them more beautiful.

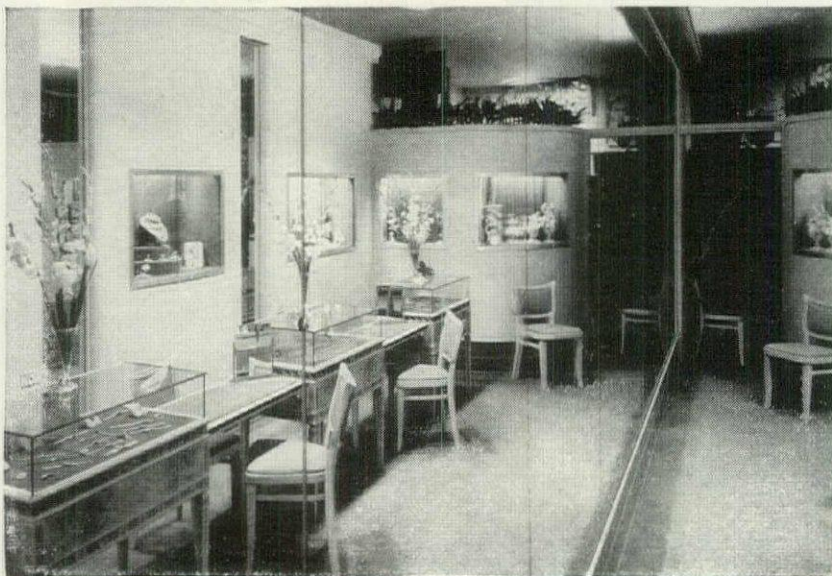
Of course, Revere is dedicated 100% to war work. No copper is available today for civilian use. Yet, America's power is beginning to be felt. And while testing ourselves for still greater effort, we yet permit ourselves to hope. Soon, perhaps, the return to peaceful ways may begin. Revere would like to help you plan for that day—and, on that day, to help you build.

BUY MORE WAR BONDS TODAY

REVERE
COPPER AND BRASS INCORPORATED
Founded by Paul Revere in 1807
Executive Office: 230 Park Ave., New York 17, N. Y.



Ideas for the use of GLASS

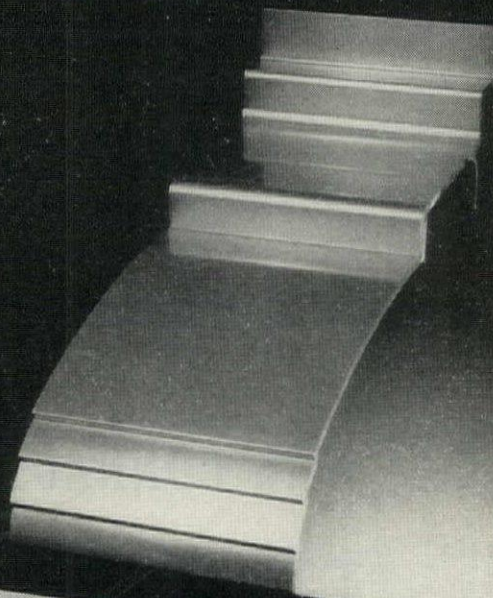


There's a new trend in store design toward the "open vision" front. By employing large areas of Pittsburgh Polished Plate Glass, unobstructed vision is permitted into the store interior, which thus supplements the sales appeal usually provided by the show windows alone. Architect: John Matthew Hatton.

No medium is so effective as mirrors in creating an impression of spaciousness in a small shop. Here, a store of narrow proportions is made to seem wider by an attractive mirrored wall. In Pittsburgh Mirrors, you have a choice of flesh tinted, blue, green or regular plate glass with silver, gold or gunmetal backing. Note the smart display niches and show cases of plate glass. Architect: V. H. Nellenbogen.



The Pittco line of metal members for use in store front and store interior design is of the exceptional high quality found only in the finest types of metal craftsmanship. This unretouched photograph of the hood member of a Pittco awning bar shows the grace, strength and quality finish typical of all members of the Pittco line.



in commercial buildings

↑
The advantages of Herculite Tempered Plate Glass make this material widely useful to the architect in the design of business establishments. Having the transparency and beauty of regular plate glass, but with four times the strength, Herculite serves ideally for entrance doors, transom panels, balustrades and show cases. Architect: Joseph Hoover.

↓
We believe you will find much to interest you in our new, illustrated booklet of ideas concerning the use of Pittsburgh Glass in architectural design. Send the coupon below for your free copy.

"PITTSBURGH" stands for Quality Glass and Paint

★ Design it better with **PITTSBURGH GLASS**

THE ACCEPTED LINE FOR EVERY ARCHITECTURAL USE

Pittsburgh Plate Glass Company
2238-4 Grant Building
Pittsburgh 19, Pennsylvania
Please send me, without obligation, your new booklet entitled: "Ideas for the Use of Pittsburgh Glass in Building Design."

Name.....

Address.....

City..... State.....

PITTSBURGH PLATE GLASS COMPANY



ONE NURSE DOES THE WORK OF TWO

with **CONNECTACALL** to help her

TYPICAL of the important contributions good communications can make toward hospital efficiency is *Connectacall*, which enables a nurse to supervise the welfare of her patients more efficiently . . . with less effort. It enables her to "look in" on any room without leaving her station, . . . to talk to patients readily, and send orderlies or aides on less important errands.

Postwar communicating and signalling systems by Connecticut Telephone & Electric Division will incorporate every desirable, proved step forward. We have reason to believe they will be available very soon after major military communications equipment needs have been taken care of.

If you have postwar construction or modernization projects in the planning stage, it will pay now, as always, to look to "Connecticut".

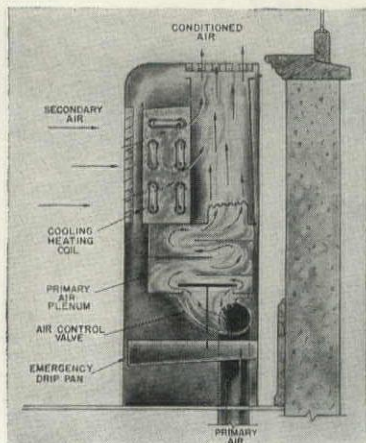


CONNECTICUT TELEPHONE & ELECTRIC DIVISION

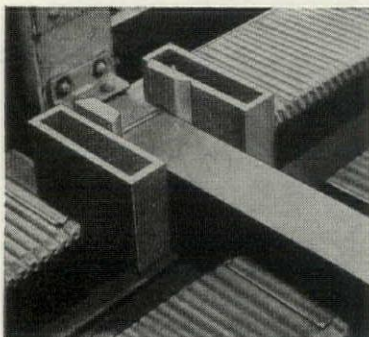
GREAT AMERICAN INDUSTRIES, INC. • MERIDEN, CONNECTICUT

Revolutionary

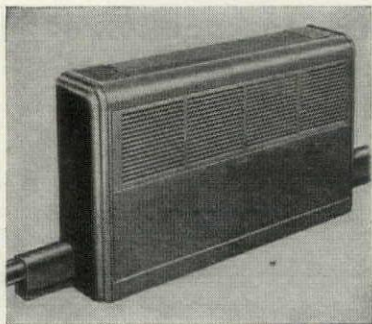
New Development in Air Conditioning for Hospitals



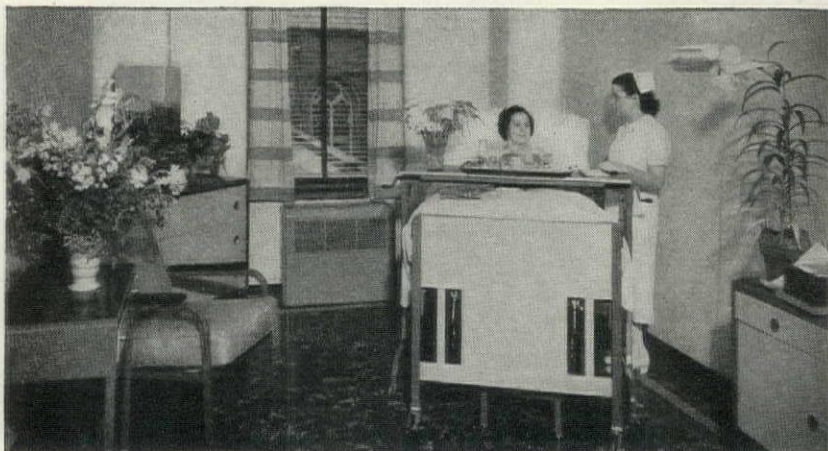
Simple and compact arrangement without moving parts, and induced air-flow are shown in this cross section drawing of Carrier Conduit Weathermaster.



(Above) Floor sleeves, much smaller than used for conventional risers, provide ample openings through floor for conduit, water pipes, and drain of Carrier Conduit Weathermaster System.



Individual room Weathermaster (above) receives high velocity conditioned air direct from outdoors. A turn of the dial sets the temperature desired and flow of hot or cold water through unit is automatically controlled. Air and water connections completely concealed. Unit has no moving parts—operation is noiseless.



Typical room in the new St. Francis Hospital, Peoria, Ill. Architect: Hamilton B. Dix. Consulting Engineers: Beling Eng. Co. General Contractor: V. Jobst & Sons. Mechanical Contractor: Crowley Bros. Carrier Weathermaster is installed under window.

FOR NEW OR EXISTING STRUCTURES; PROVIDES INDIVIDUAL ROOM CONTROL

PATIENTS in the new St. Francis Hospital, Peoria, Ill., have a better chance for recovery, thanks to a revolutionary new development in air conditioning—the Carrier Conduit Weathermaster System.

Odors and germs cannot circulate from room to room through this system, nor does it transmit noises. Each room has its own individual Weathermaster supplying an abundance of clean, outdoor air, properly humidified, and kept at the temperature wanted in *that* room. Doctor or nurse changes temperature by dialing "warmer" or "cooler." Temperatures in adjoining rooms may vary widely, as desired.

Advantages of the new system are obtained through a basic development in design—use of compact conduits instead of conventional ducts for carrying high-velocity conditioned air from a central station apparatus to individual rooms. Saves 85% of floor space required for conventional ducts—provides as much as one extra floor of usable space in an eight story structure. Easily installed in existing buildings. Amazingly low installation and operating costs. Write now for a brochure detailing the advantages of the Carrier Conduit Weathermaster System.

CARRIER CORPORATION, Syracuse, N. Y.

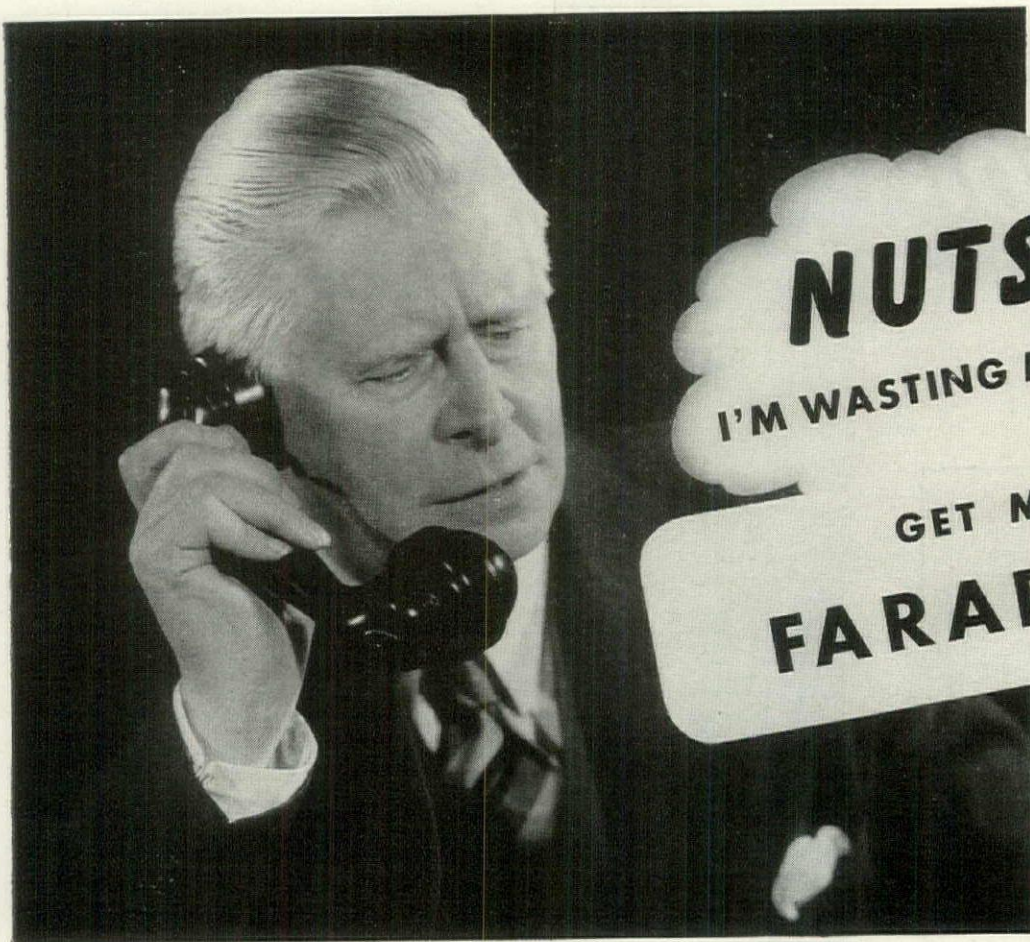
Carrier engineers will gladly cooperate with architects and consulting engineers toward incorporation of air conditioning, refrigeration, and industrial heating in the design and renovation of post-war structures.



Carrier

AIR CONDITIONING • REFRIGERATION





THERE'S NO OBLIGATION IN ASKING FARADAY COMMUNICATIONS CONSULTANTS FOR SIGNAL SERVICE

Your time is crowded. The time of Faraday communications consultants is yours for the asking—to confer on any modern signal system you may have to plan. There is absolutely no obligation involved in this offer. It's a service we are glad to render to architects. Simply telephone your nearest Stanley & Patterson office, and a Faraday man will call. He will gladly recommend the equipment most suited to your purpose, and will prepare exact specifications if you wish.

Valuable Reference Manual: The complete Handbook of Faraday signals is a valuable reference manual, offered free to architects, engineers and other executives. Write today on your letterhead.



Signaling systems of all types for:

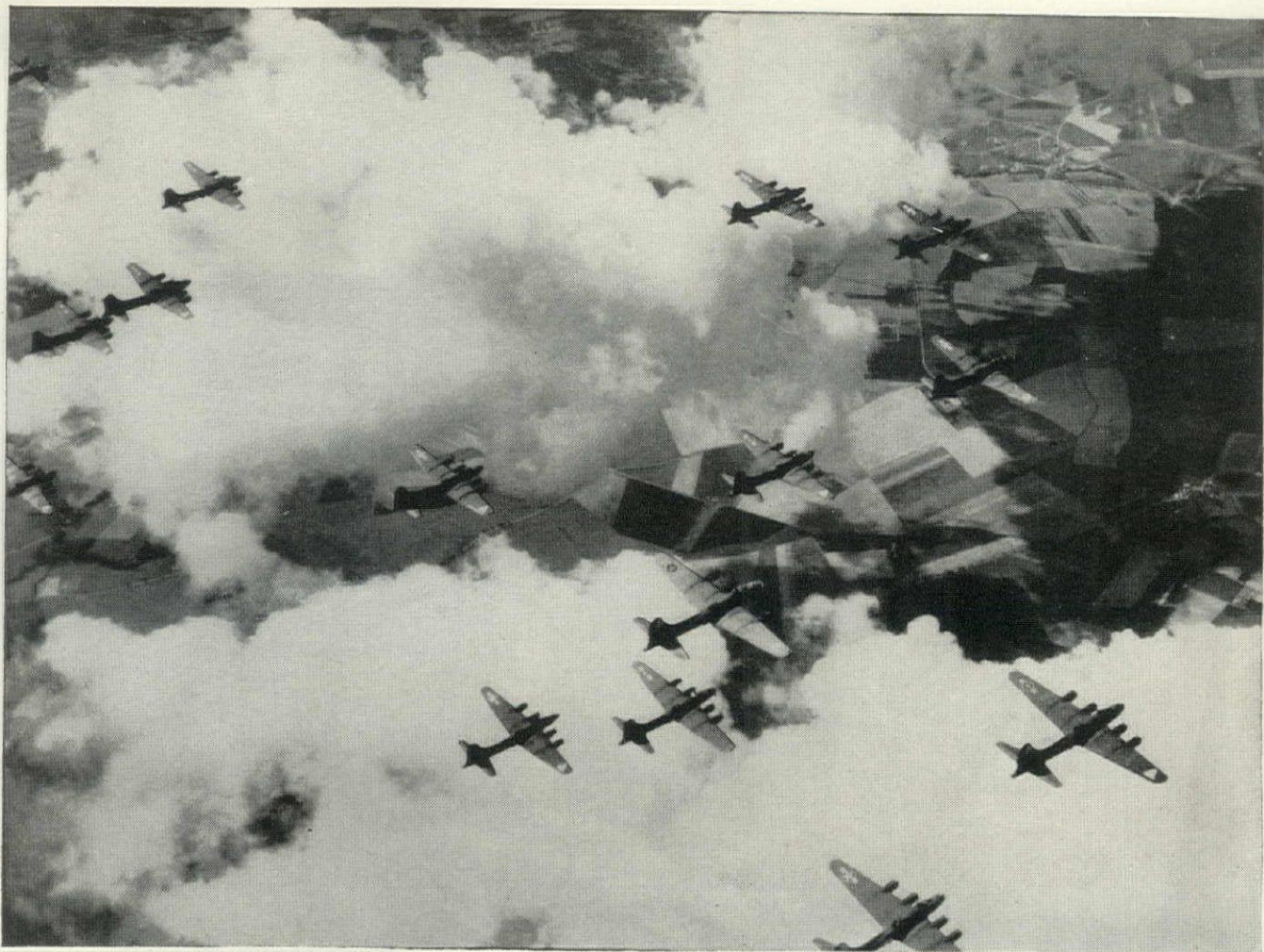
HOTELS
HOSPITALS
SCHOOLS AND COLLEGES
INDUSTRIAL PLANTS
APARTMENT BUILDINGS
DEPARTMENT STORES
OFFICE BUILDINGS
PUBLIC BUILDINGS

... and all other signaling needs.

STANLEY & PATTERSON DIVISION

OF FARADAY ELECTRIC CORPORATION • ADRIAN, MICHIGAN

DISTRICT OFFICES IN: ATLANTA • BOSTON • CHICAGO • DALLAS • DENVER • DES MOINES • KANSAS CITY
LOS ANGELES • NEW YORK • PHILADELPHIA • ST. LOUIS • SAN FRANCISCO • SALT LAKE CITY • SEATTLE • WASHINGTON
IN CANADA: BURLEC LIMITED, TORONTO 13



B-17 Flying Fortresses on raid over Stuttgart, Germany, Sept. 6, 1943. A. A. F. photo

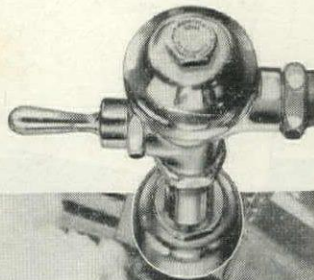
... in reply to yours of December 7th

Ever since Pearl Harbor, the Sloan Valve Company has been working day and night turning out various items of war matériel. We have produced millions of parts for airplanes, guns, tanks, armored vehicles and ammunition fuzes—each accurately machined to micro-tolerances. Sloan employees have worked diligently and with meticulous care to maintain the accuracy required in their work and the urgent delivery schedules demanded by the progress of the war.

But while we were busy at this war work, Sloan engineers developed the emergency VICTORY Model Flush Valve which has conserved thousands of tons of copper, *plus* developing new and improved flush valves for after-war production. Sloan Flush Valves have always been precision-made water measuring instruments—small wonder there are more Sloan Flush Valves sold than all other makes combined.

SLOAN VALVE COMPANY

4300 WEST LAKE STREET • CHICAGO 24, ILLINOIS



MACHINE C

Fraser & Fraser, Architects
Industrial Bank Bldg.
Detroit, Michigan

Gentlemen:

Please permit me to
reconvert our plant for
thoroughly modern equipment.

Our market
time-saving devices which
meet competition in the
lowered costs make possible.

Preliminary
which should enable us
our Board of Directors.

Please
so that steps may be taken.

*Memo - specify
Magic Doors in our
plans for the new
Jones Corp. plant.
J. R.*



President

TIME-SAVING is Basic in Industry

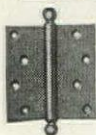
**Stanley Magic Doors Open At Approach
... Close After Passage ... Completely
Automatic ... Save Working Time ...
Eliminate Damage ... Quickly Repay
Their First Cost**

Every minute saved in transportation of parts or packages between departments in any industrial plant saves money. Stanley Magic Doors save minutes that add up to dollars every day. They speed up traffic, reduce accidents, save heat, eliminate breakage, cut door repair costs. For these reasons, architects took a professional liking to them right from the start!

Stanley Magic Doors, actuated by "electric eye", have been thoroughly time-tested. Their streamlined action earned a leading place in modern building plans. Make these sturdy, dependable, money-saving doors a part of your earliest discussions of industrial and commercial building projects. Stanley will cooperate with you in preparing plans and specifications. Fill out and mail the coupon now.



STANLEY



The trade-mark that appears on highest quality Butts, Hinges and other Hardware Equipment for commercial, industrial and residential buildings.

SEE OUR
CATALOG IN
SWEET'S

The Stanley Works,
Magic Door Div.,
New Britain, Connecticut

Gentlemen: Please send full information on Stanley Magic Doors for
() Commercial () Industrial Use.

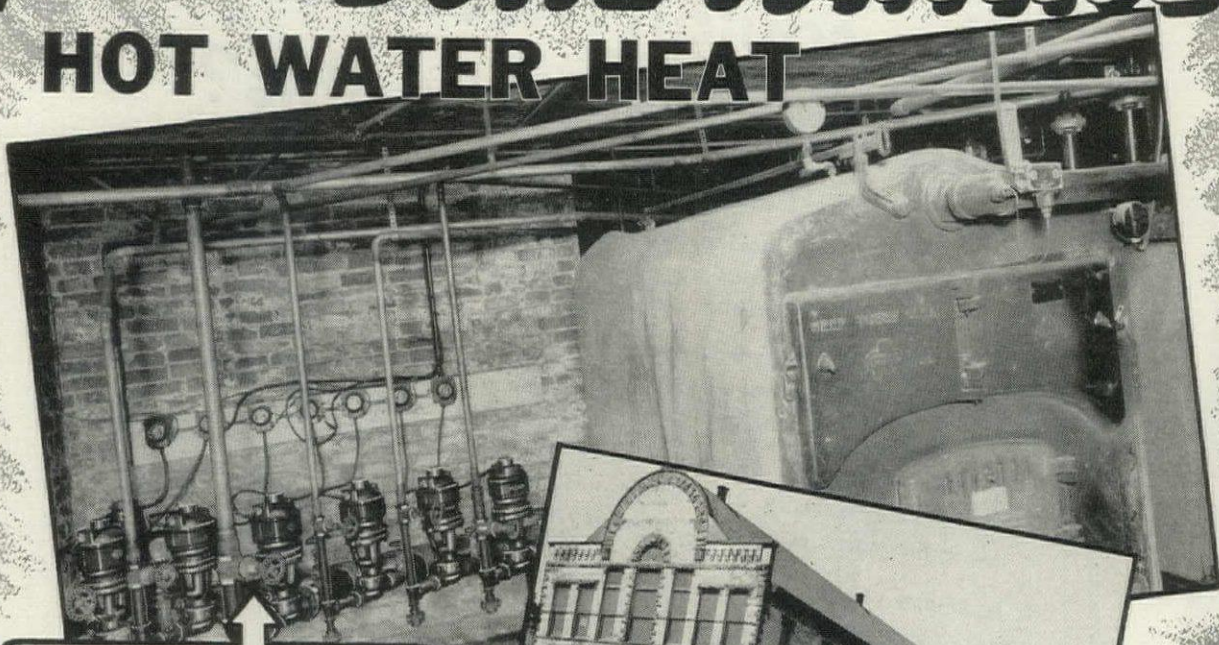
Name.....
Firm Name.....
Street..... State.....
City.....

STANLEY MAGIC DOORS

REQUIRE NO HAND TO OPEN

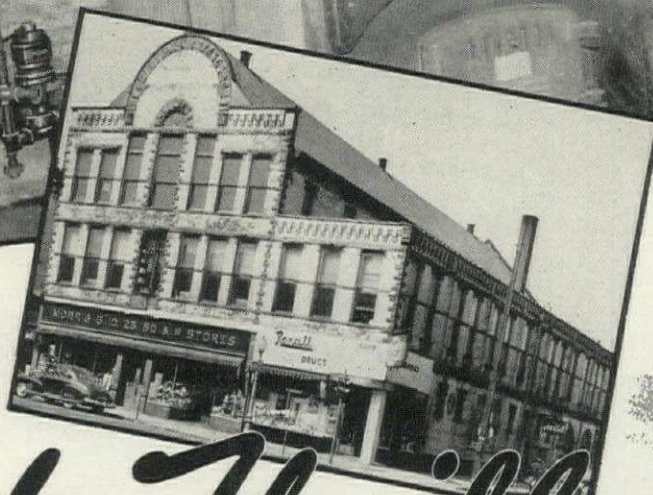
Thrush **ZONE CONTROL**

HOT WATER HEAT



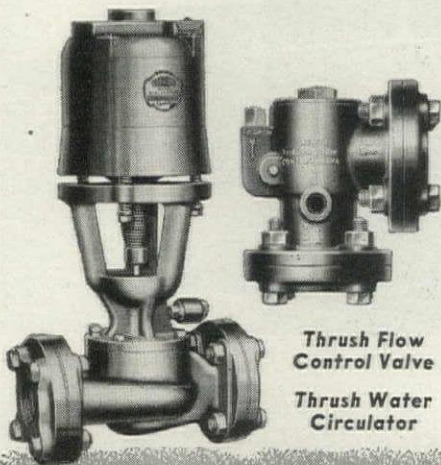
SEVEN ZONES

CONTRACTOR:
Rex Stoner, Elwood, Indiana
WHOLESALER:
The Knapp Supply Co., Muncie, Ind.



Amazingly Flexible

HERE is an ideal example of Thrush Zone Control applied to the heating system of a combined business and fraternal or apartment building. The Masonic Temple at Elwood, Indiana, shown here, has seven zones, each of which is entirely independent of the others. The importance of this arrangement is obvious when you consider that the drug store is open more hours than the variety store or barber shop, while the kitchen, dining room and lodge rooms on the second floor are used only periodically. Each receives just the amount of heat it requires without overheating. The fuel saved is surprising. When compared with the cost of central city heating formerly used, the new Thrush installation is saving at least half the annual fuel bill. Owners of similar buildings, including apartments and larger residences, will thank you for telling them about Thrush Zone Control. Get all the facts now from your wholesaler or write Dept. H-10.



Thrush Flow
Control Valve

Thrush Water
Circulator

H. A. THRUSH & COMPANY . . . PERU, INDIANA

Who couldn't work better in a factory like this?

To make it a good looking, cheerful place in which to work was the aim of this company and its architects.

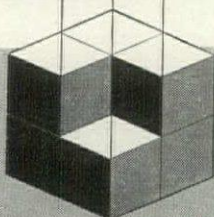
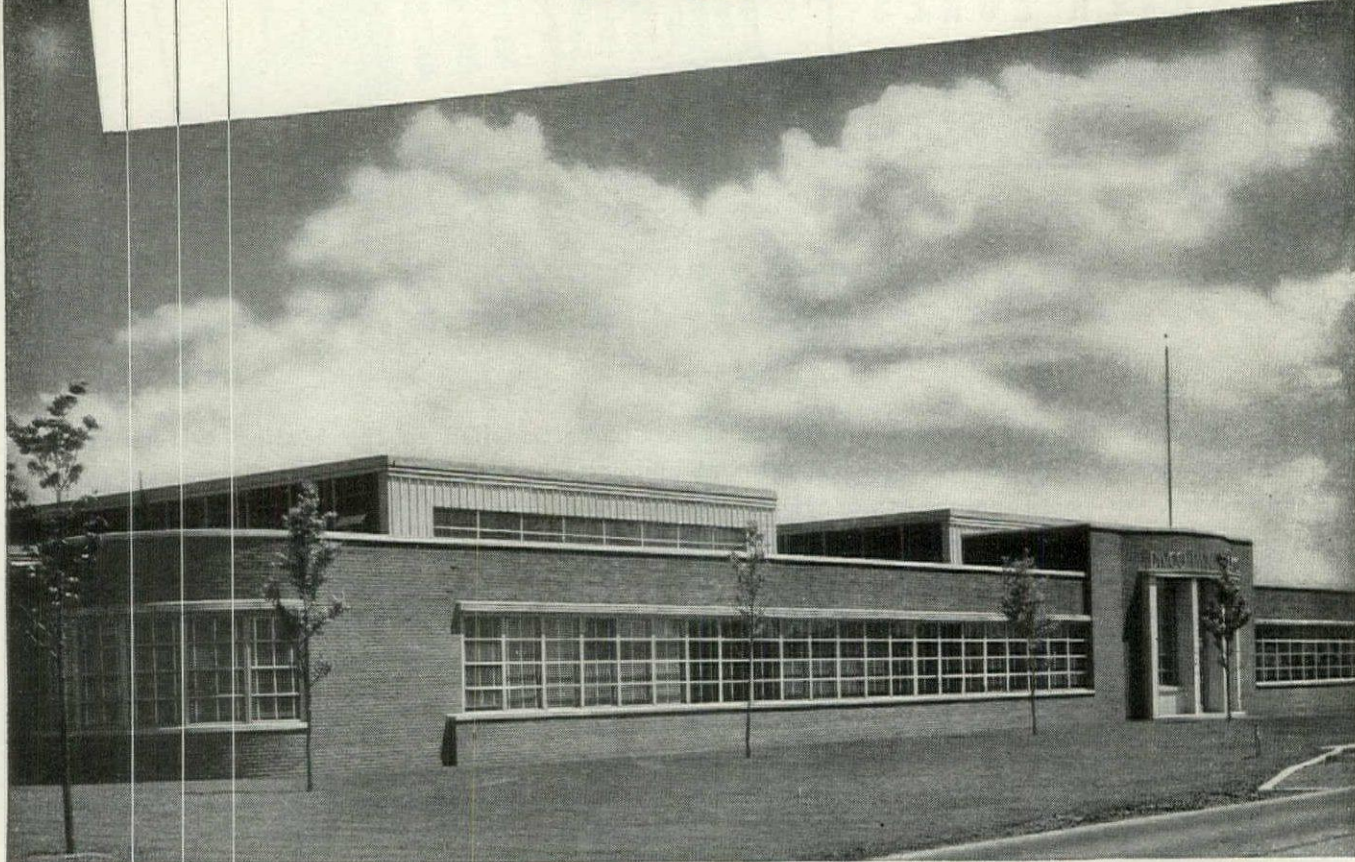
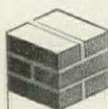
That explains, in part, why it was built of brick. Brick has always been known for its fresh, permanent beauty.

But there were other good reasons for selecting clay masonry. It is fire safe. It is low in first cost...economical in upkeep.

Architects who design new factories, or

modernize old ones, can turn to clay masonry with complete freedom. It imposes no restriction on artistic conception. It is available in a wide range of colors and textures. And soon — it will be available in modular units, sized to eliminate designing and erection time.

Write for literature, including complete specifications for facing interiors. Structural Clay Products Institute, 1756 K Street, N.W., Washington 6, D.C.



After the war . . it will be built of modular designed

BRICK AND TILE



A Recreation Room . . . with a view to the future

Typical of the modern home designs now being developed for the great postwar building market is the above recreation room in a Sunken Garden Home, designed for Timken's current consumer advertising campaign by Harold H. Ehler, member of American Institute of Architects.

Regardless of the size or type of new homes, builders and home owners are unanimous in demanding the newest and best in equipment. No home is better than its heating system, and Timken Silent Automatic, with all its years of furnishing fine heating systems for homes of every type and description, will be in a better position than ever to supply the right kind of heating equipment for postwar home building.

New Timken Silent Automatic heating and air conditioning equipment, ready for production as soon as wartime restrictions can be relaxed, will set new standards of comfort, economy and modern styling.

Work with the nearest Timken Dealer now on your plans for the future. You will find his services invaluable in helping you select the most satisfactory automatic heating equipment.

TIMKEN

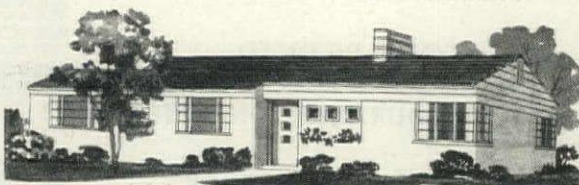
Silent Automatic

**Quality Home Appliances—
for Comfort, Convenience and Economy**

Division of THE TIMKEN-DETROIT AXLE CO., Detroit 32, Michigan



Garden side of this smart, truly American home. This home can be heated better, more economically with Timken Silent Automatic Heating.



Free! New booklet showing floor plans and details of this interesting home, as well as other new homes and recreation rooms, designed by outstanding architects. Offered to stimulate thinking about postwar homes, this booklet contains many worthwhile ideas on modern home designs and equipment. Mail coupon today.

SEND FOR FREE BOOKLET

To: TIMKEN SILENT AUTOMATIC DIVISION
400 Clark Avenue, Detroit 32, Michigan

Send FREE booklet on new homes to:

Name

Street Address

City and State

PLEASE PRINT NAME

SPECIFY 'INCOR' TO KEEP FALL JOBS ON SCHEDULE

FALL temperatures average about 50 degrees, retard the hardening of concrete, delay stripping schedules, slow down the job. Sudden cold snaps expose concrete to freezing risk, in this in-between season, before winter methods are in use. 'Incor' 24-Hour Cement is the sound solution. Without protection, 'Incor' concrete at 50 degrees attains stripping strength 2 or 3 days sooner, which means—

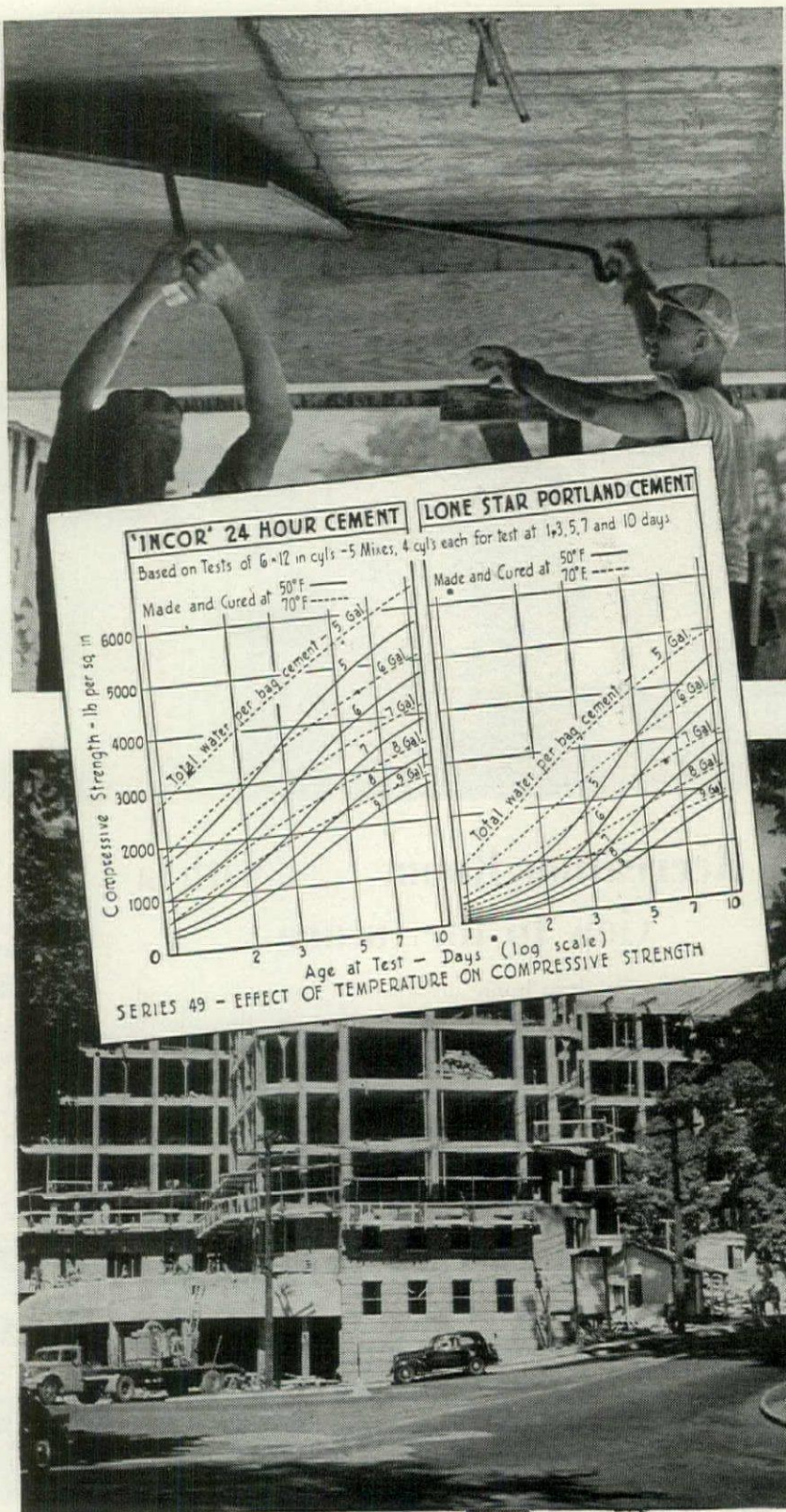
JOB PROGRESS MAINTAINED

FREEZING RISK AVOIDED

COSTS REDUCED

STRONG, DURABLE CONCRETE

Specify 'Incor'* 24-Hour Cement . . . save time, money, worry . . . get better concrete at less cost. *Reg. U.S. Pat. Off.

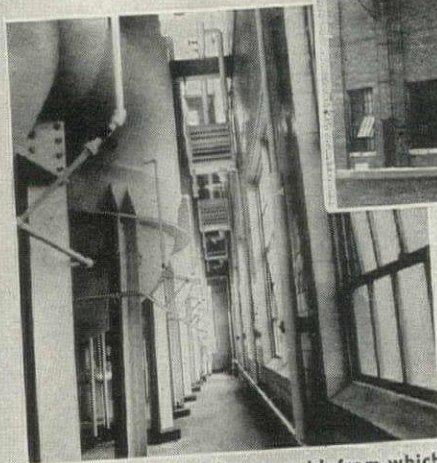
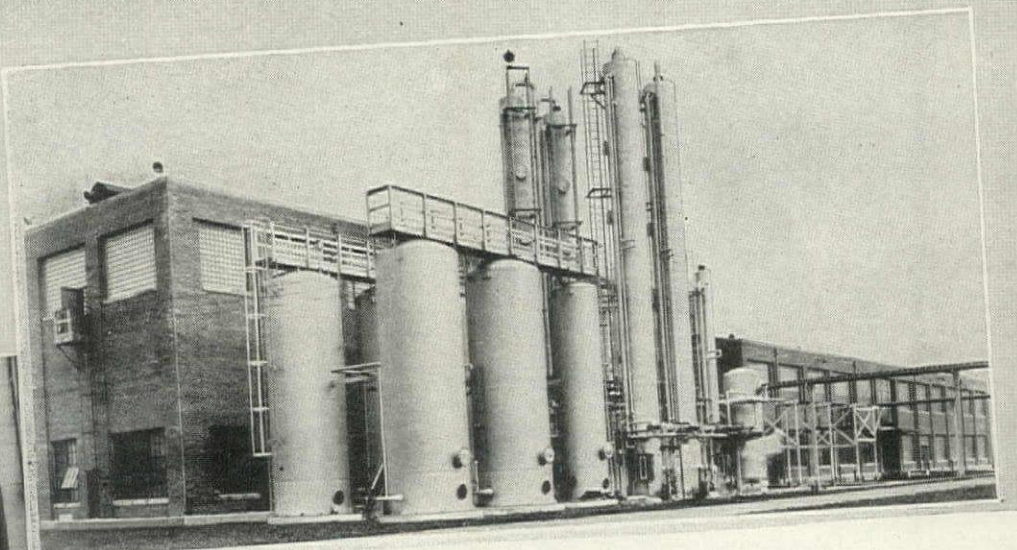


LONE STAR CEMENT CORPORATION

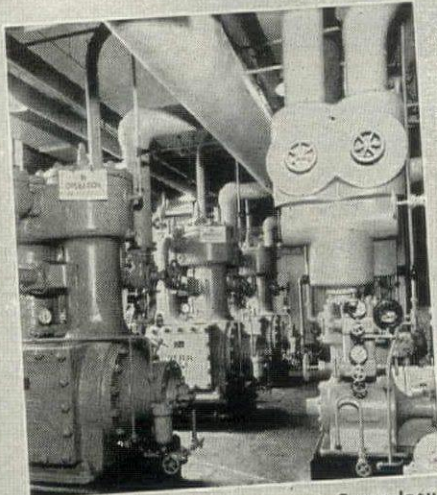
LONE STAR CEMENT, WITH ITS SUBSIDIARIES, IS ONE OF THE WORLD'S LARGEST CEMENT PRODUCERS: 15 MODERN MILLS, 25-MILLION BARRELS ANNUAL CAPACITY . . . OFFICES: ALBANY • BIRMINGHAM • BOSTON • CHICAGO • DALLAS • HOUSTON • INDIANAPOLIS • JACKSON, MISS. • KANSAS CITY, MO. • NEW ORLEANS • NEW YORK • NORFOLK • PHILADELPHIA • ST. LOUIS • WASHINGTON, D. C.

17 Years' Outstanding Performance . . . 'INCOR' . . . America's FIRST High Early Strength Portland Cement

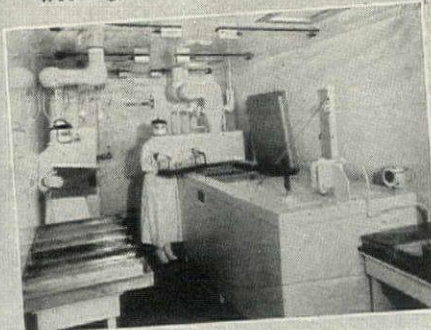
General view of plant, showing raw material storage and solvent recovery equipment. Huge towers are Carey-Insulated.



Fermentation tanks where mold, from which penicillin is obtained, is grown by the new "deep culture" process. All of these tanks are insulated with Carey materials.



Ammonia refrigeration room—Carey-insulated. Compressors furnish about 375 tons of ammonia-system refrigerant for storage, freezing, and cold processing.



Cold room where vials of Penicillin-C.S.C. are frozen. The walls and ceiling in this room, as well as the lines, are insulated with Carey materials.

COMMERCIAL SOLVENTS CORPORATION

Specifies **Carey** HEAT INSULATIONS

for its new

PENICILLIN PLANT

When the government called for huge quantities of life-saving penicillin for our armed forces, one of the important organizations to respond was Commercial Solvents Corporation. That Company's quarter century of experience with micro-biological processes enabled it to bring "Penicillin-C. S. C." into mass production in an incredibly short time.

At this Commercial Solvents Corporation plant, production of penicillin by the deep-fermentation process is in full swing. Heat processing, dehydration, and freezing are all involved in this production. And here again, as in so many vital industries, an important part is played by CAREY INSULATIONS.

To maintain uniform temperature at each stage of production, insulating materials of utmost efficiency and dependability were selected—Carey 85% Magnesia, Carey Rock-Wool Blankets, Carey Asbestos Cement, and Carey Thermotex for waterproofing.

In highly specialized industries, as in power plants of public utilities and industry in general, reliable Carey Insulations are standing firm guard against temperature variations, preventing heat losses, making possible maximum power production from minimum fuel. For details, write Dept. 20.

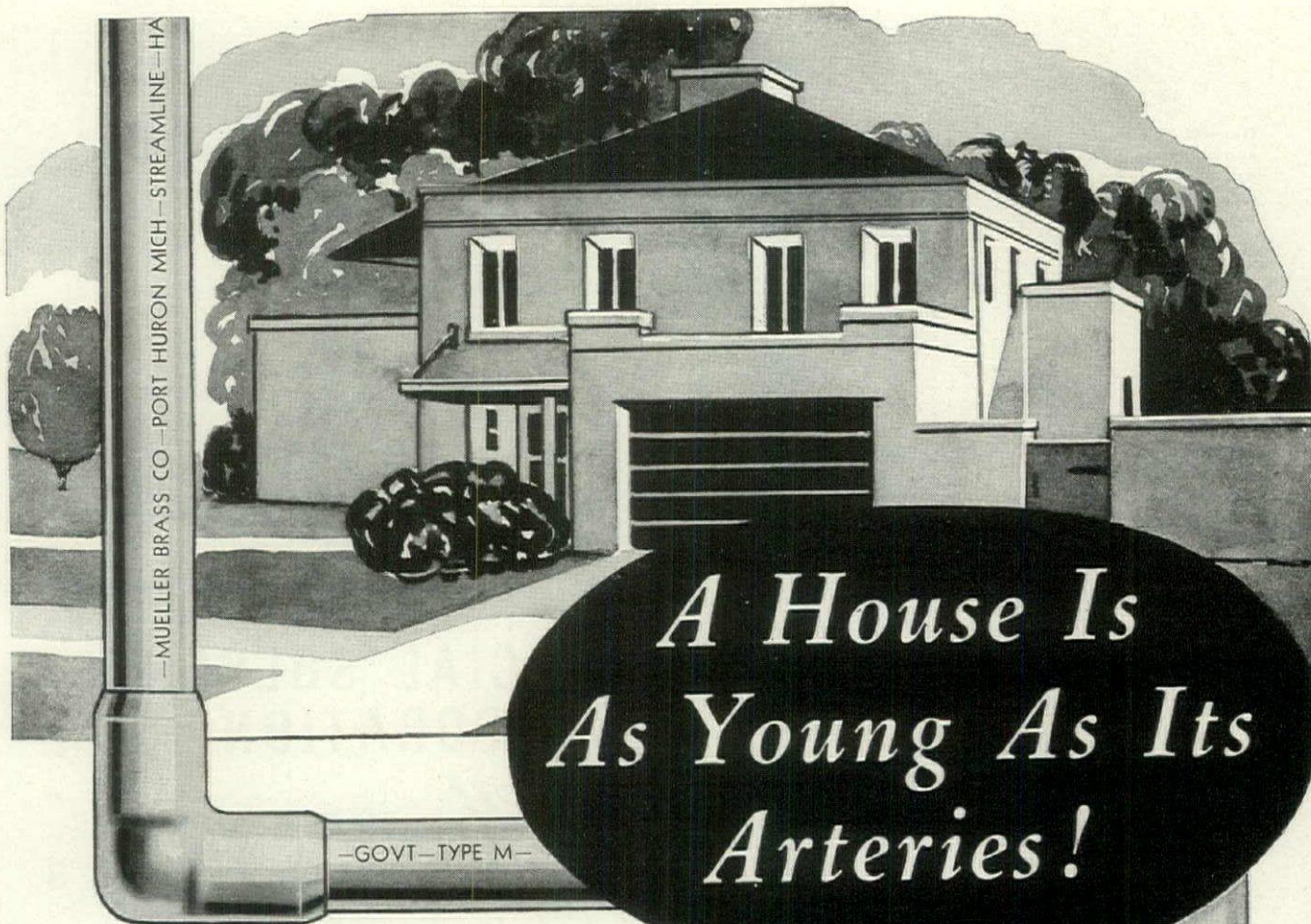
THE PHILIP CAREY MFG. COMPANY

Dependable Products Since 1873

In Canada: The Philip Carey Company, Ltd.

LOCKLAND, CINCINNATI, OHIO

Office and Factory: Lennoxville, P. Q.



A House Is As Young As Its Arteries!

● Two residents may look alike, yet be actually as far apart as the poles in accomplishing the main reason for which they were built. ONE IS A HOME, while the other is "just another house." One contains the essentials for livability—for the promotion of convenience, comfort and continued efficiency, while the other does not. The real home has a reliable plumbing or heating piping system—the other has not. A building may be the last word in modern design with beautiful and modern bathroom and kitchen fixtures, but they are utterly inefficient if the arteries which supply them with hot and cold water are defective and unreliable.

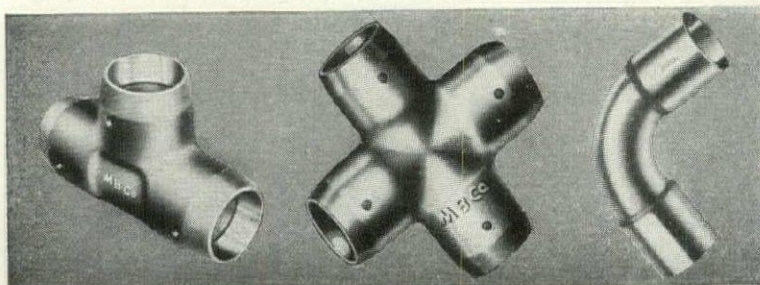
OF ALL THE SERVICE UNITS IN THE HOME NOTHING IS SO VITALLY IMPORTANT AS A RELIABLE PIPING SYSTEM—THESE ARE ITS ARTERIES—yet they are sometimes given the least consideration.

Equip the post-war home with the piping that is as modern as tomorrow—a STREAMLINE copper piping system that will be just as good on all the succeeding tomorrows as long as the building stands.

A STREAMLINE piping system cannot rust; it doesn't leak; it conducts hot water faster and with less heat loss by radiation than iron or steel pipe and—it costs but little more than rustable pipe, even in first cost—and over a period of years it costs a great deal less.

While you build the house, build your own reputation. Standardize on STREAMLINE for your post-war homes. It will pay you big dividends—it will help you move property faster.

HURON MICH—STREAMLINE—HARD—GOVT—TYPE M—



STREAMLINE
PIPE AND FITTINGS DIVISION
MUELLER BRASS CO.
PORT HURON, MICHIGAN



The walls of tomorrow's homes will have a new job to do!

THE homes you design tomorrow will have many new improvements, in equipment, in construction.

New methods of heat control demand that walls provide adequate insulation.

Air-conditioning demands that walls be so constructed that *moisture condensation within the walls be reduced to a minimum*. If not, serious trouble will inevitably result.

If you specify the Approved Insulite

Wall of Protection, you'll accomplish these two objectives. This wall, by its scientific construction principles, gives:

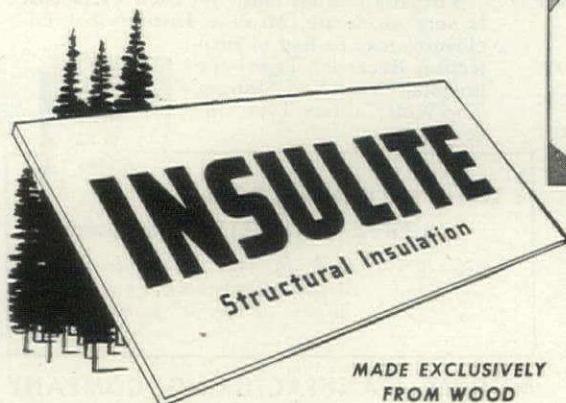
Double Insulation . . . plus Superior Bracing Strength . . . plus Protection Against Internal Moisture Condensation.

The illustrations below explain, in broad terms, the wall's construction. For complete details, consult Sweet's Architectural File, Section 10, or write for free "Scientific Facts" booklet.



INSULITE

MINNEAPOLIS 2, MINNESOTA

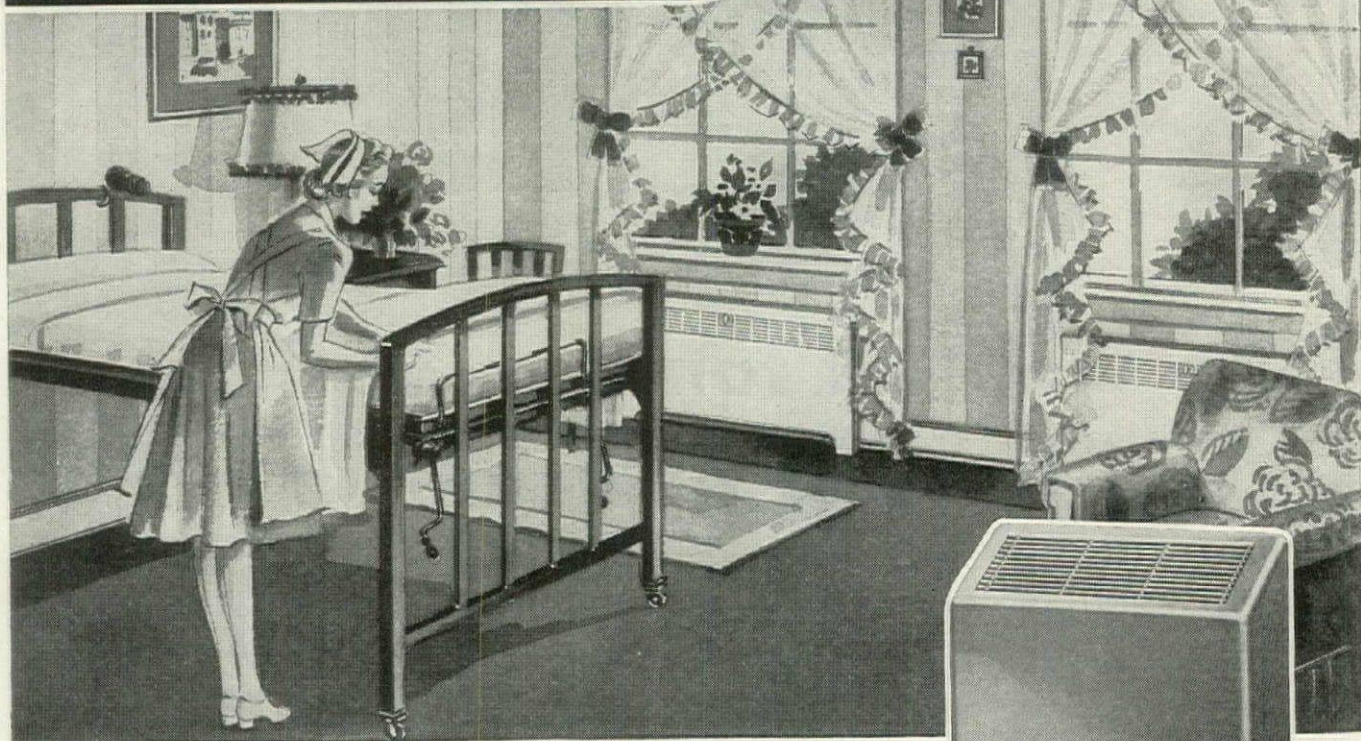


OUTSIDE THE STUDS, Insulite Bildrite Sheathing. The large boards provide a wind-proofed, weather-tight wall. Bildrite provides a bracing strength four times that of wood sheathing, horizontally applied.

INSIDE THE STUDS, Sealed Lok-Joint Lath furnishes a second wall of insulation. The patented Lok-Joint provides a strong, rigid plastering surface, prevents joints from opening under trowel pressure.

● Sealed Lok-Joint Lath, with asphalt barrier against the studs, effectively retards vapor travel. Bildrite Sheathing, being permeable to vapor, permits what little vapor escapes to pass naturally towards the outside.

As modern and distinctive
as the buildings
you are designing today



...SPECIFY **modine** CONVECTORS NOW

• You can do more than just look ahead. You can *work ahead* on the heating specifications for the buildings you are planning now. Even for those essential buildings to be constructed before V-Day.

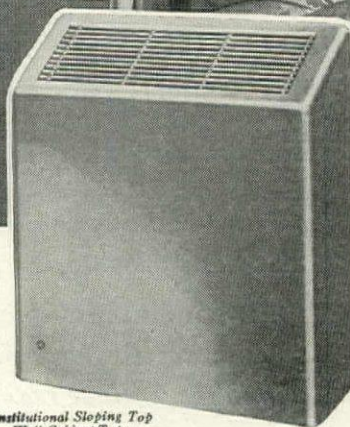
And you can be sure that with Modine Copper Convectors their heating systems will be just as modern as the buildings you're designing today.

Distinctly different from con-

ventional radiators . . . Modine Convectors are vastly more attractive in appearance. They combine space-saving compactness and convenience with automatically controlled comfort . . . extra economy with all the efficiency of steam or hot water systems.

All detailed data is ready now—types, dimensions, etc.—right in the new Modine Convector catalog.

*Institutional Sloping Top
Wall Cabinet Type*



• A New Line of Enclosures Specifically Designed for Institutional Applications—Not only do these enclosures have the extra weight usually specified (fronts are 14 ga. and backs 18 ga. steel) but other special design features most frequently called for. Strikingly smart in appearance, but extra strong, grille has 80% free area for high heat delivery with extremely low air resistance.

Virtually custom built, yet their extra cost is very moderate, Modine Institutional Enclosures may be had in Projection Recessed Type (see hospital view); and Sloping Top Wall Cabinet Type (inset).



Write for Catalog SA-44
• Filed in SWEETS •



Look in your phone book for
Modine representative's name—
"Where to Buy It" section.

modine
Convectors



MODINE MANUFACTURING COMPANY

1736 Racine Street, Racine, Wisconsin

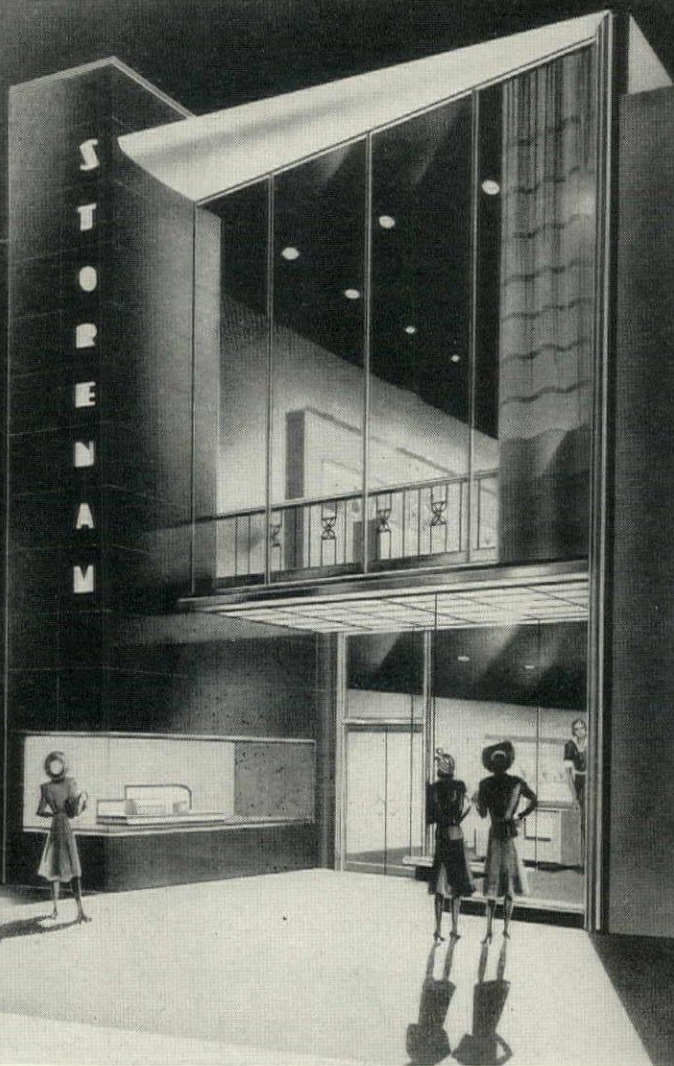
THERE IS A NEW TREND IN STORE DESIGN

"The design contemplates merchandise typical of the needs of a small community. To make the interior as inviting as possible to passers-by, display window backs and divisions between departments are limited to structural glass, and both display window and entrance vestibule are strongly illuminated from glass ceiling panels.

The first floor is devoted to the merchandising of men's wear, sports, electrical equipment, etc., together with such items of women's wear as may be attractive to shoppers en route to other departments. The entire second floor is devoted to the outfitting of women.

Structural features, in addition to plate glass, include Herculite Doors, Carrara Structural Glass exterior, mirrors and glass front stock cases and counters."

Edwin H. Silverman
Abraham Levy



SILVERMAN & LEVY'S conception of a General Store

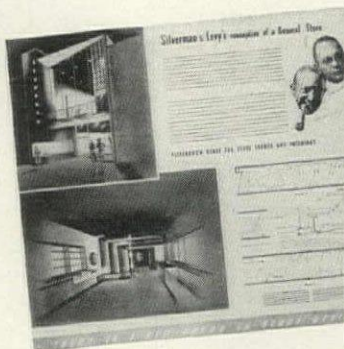
In this design, as in the store designs of leading architects throughout the country, Pittsburgh Glass plays a prominent part. These glass products are particularly suited to help in the creation of striking, sales-winning store fronts and interiors. They are versatile. Consistently high in quality. And serviced through a nationwide system of Pittsburgh branches and dealers

which assures ready availability anywhere.

Hundreds of thousands of merchants are being urged to consult architects by Pittsburgh Plate Glass Company. Advertisements running regularly in 21 leading retail magazines suggest planning now for postwar building and alterations, with the help of architects.

FREE!

Two perspectives, plan, and several details of this design—on a 21" x 25" sheet. The fifth of a series of store designs by some of America's leading architects. Mail the coupon now.



Pittsburgh Plate Glass Company
2290-4 Grant Building, Pittsburgh 19, Pa.
Please send me, without obligation, your sheet showing more complete drawings of the General Store by Silverman & Levy.

Name _____

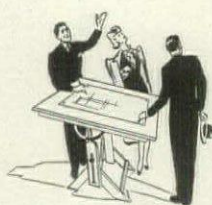
Occupation _____

Address _____

City _____ State _____

"PITTSBURGH" stands for Quality Glass and Paint

Your Design for a small post-war home may win this \$2500.00 Contest



The United States Plywood Corporation in cooperation with Arts & Architecture, invites your entry to the second annual contest for the design of a small post-war home.

The competition . . . open to all architects, engineers, designers, draftsmen and students . . . started officially September 20, 1944 and runs for three months until December 20, midnight. Entries will be accepted up to that time at the office of Arts & Architecture, and are eligible if postmarked no later.

UNITED STATES PLYWOOD CORPORATION

616 West 46th Street, New York 19, N. Y.

Manufacturers of Weldwood Plywood and Plywood products

Douglas Fir	Northern Hardwoods
California Pine	Southern Hardwoods
Tekwood *	Armorpil* Weldwood
Tempered Tekwood *	Low pressure plastics
Molded Weldwood	Tempreg *

*Registered trademarks

\$2500.00 IN PRIZES WILL BE DISTRIBUTED AS FOLLOWS:

1st Prize	\$1250.00
2nd Prize	500.00
3rd Prize	250.00
Honorable Mention . . .	100.00
Honorable Mention . . .	100.00
Honorable Mention . . .	100.00
Honorable Mention . . .	100.00
Honorable Mention . . .	100.00

Winning designs will be exhibited in principal cities all over the United States. Full credit will be given the designer.

There are no entry fees of any kind. You can get complete information on rules and regulations by writing to Mr. Sumner Spaulding, Arts & Architecture, 3305 Wilshire Boulevard, Los Angeles 5, California.

The United States Plywood Corporation is happy to offer jointly this opportunity for the expression of ideas that must now be uppermost in the minds of all concerned with the improvement of the American standard of living.



Let's Look at the Record



Haish Memorial Library, DeKalb, Illinois,
Architects—White & Weber, Chicago.

Judging by performance, aluminum roofing and skylights have a promising future

Installed in 1931, the aluminum batten-seam roof and skylight on Haish Memorial Library go faithfully about their business of protecting the building's valuable contents. And, judging by the excellent condition of the aluminum, they can be expected to be on the job for many years to come.

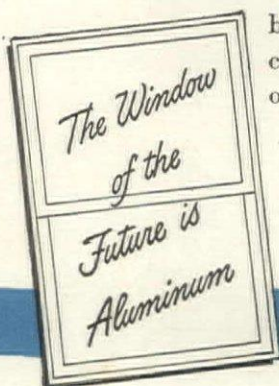
"Performance has been satisfactory in every respect," says Mr. Louis Bartos, caretaker of the building ever since it was erected thirteen years ago.

Service records like this are being reported from every corner of the United States; on aluminum windows, sills

and flashing, roofing, skylights, ventilators, wall copings, spandrels, fronts, doors and grill-work. In many cases, wartime shortages of help have caused maintenance to be slighted. Yet, underneath the surface grime, the aluminum is sound.

Because architectural aluminum requires so little attention, designers of the hospitals, recuperation centers, housing projects and other public works, will do well to include aluminum in those jobs now in the design stage.

ALUMINUM COMPANY OF AMERICA, 2166 Gulf Building, Pittsburgh 19, Pennsylvania.



ALCOA ALUMINUM



Reg. U. S.

Pat. Off.



THE PATTERN OF BEAUTY .

WHEN the walls give way to windows . . . when windows perform the function of walls . . . when WINDOWALLS find their proper spot under the inspired direction of the modern architect, then the pattern of outdoor beauty completes the design of the home and its colorful furnishings.

Yet with all their power to bring beauty into the home, WINDOWALLS serve in two other faithful and essential roles: first, to supply fresh air in seasons of warmth; second, to act as weathertight barriers against the tantrums of the weather.

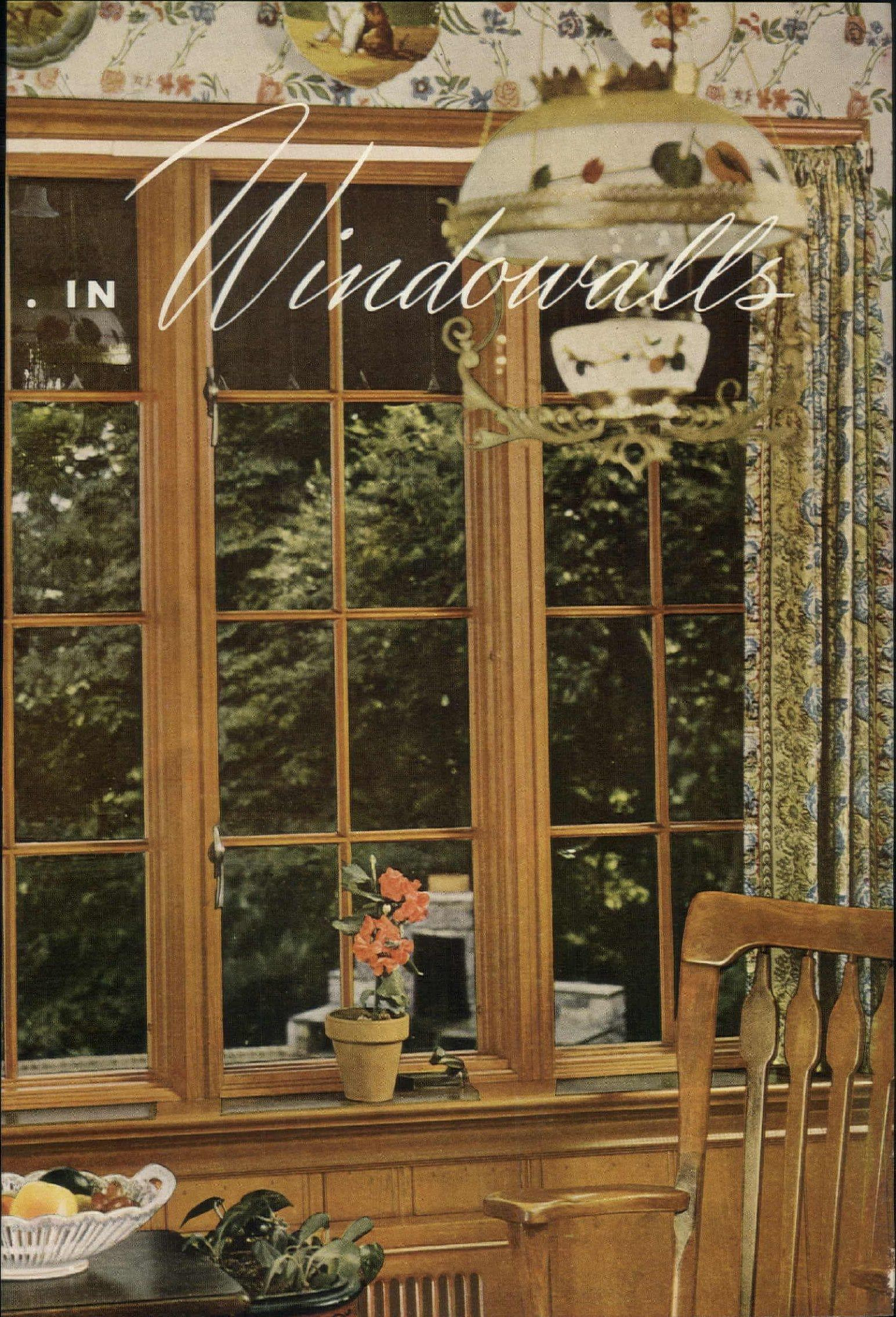
WINDOWALLS in this Clifton, New Jersey, home, designed by Karl K. Loven, architect, are Andersen Casement Window Units. Consult Sweet's Catalog or write Andersen.

Andersen Corporation

BAYPORT • MINNESOTA

. IN

Windowalls





STILL

in service

Copper Cresting installed in 1893
by Nicholson & Galloway Inc.,
New York.

**This Half-Century-Old
Cresting Demonstrates
the Durability of
Copper**

WAR BONDS
Buy more than before
TO SHORTEN THE WAR

Typical of the architecture of the nineties, the ornate cresting atop the Home Life Insurance Company Building, New York City, remains in good condition today—fifty-one years after installation.

It is an excellent example of the sheet metal worker's art of fifty years ago. But, more than that, it emphasizes again the endurance of copper—its easy workability, corrosion-resistance, and lasting beauty.

4451-A



Anaconda Copper

THE AMERICAN BRASS COMPANY—General Offices: Waterbury 88, Connecticut
Subsidiary of Anaconda Copper Mining Company

In Canada: ANACONDA AMERICAN BRASS LTD., New Toronto, Ont.

REMODEL NOW WITH GENUINE **STRUCTURAL BENDS** ORIGINAL OF TEMPERED MASONITE

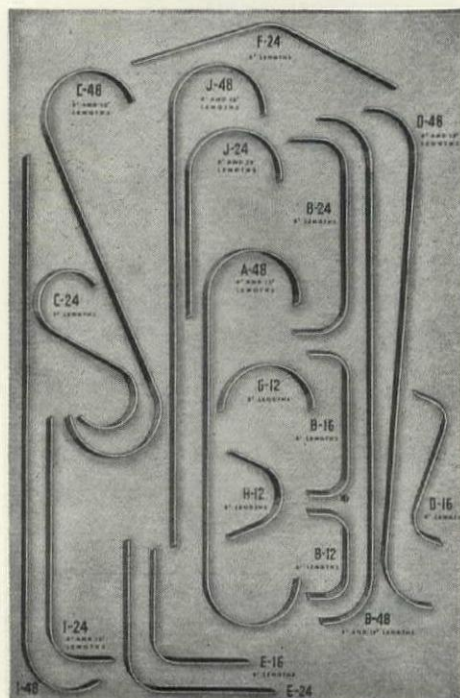
REGISTERED TRADE MARK

Genuine Structural Bends are a practical, inexpensive material, made of strong, durable, tempered Masonite. They are flexible . . . easy to cut . . . construct . . . finish and install. 17 Basic shapes, available in 8 foot and 12 foot lengths. Any height . . . any shape . . . any size areas can economically be treated. They are designed to meet the

requirements of modern remodeling and new construction . . . excellent for lighting installations. Time tested . . . durable . . . modern . . . extremely practical . . . Structural Bends afford almost unlimited opportunities for creating outstanding effects . . . with simple construction . . . at low cost.

DESIGN NUMBER	Description	SINGLE PIECE PRICE
12 INCH DESIGNS —formed from 12 inch widths 8 foot long—1/10 inch thick		
G-12	1-180° BEND — 8' LONG (Width after bending 6") Smooth both sides	\$3.00
16 INCH DESIGNS —formed from 16 inch widths 8 foot long—1/10 inch thick		
B-16	2-90° BENDS — 8' LONG (Width after bending 11 1/4") Smooth both sides	3.25
D-16	2-90° BENDS — 8' LONG (Width after bending 11 1/4") Smooth both sides	3.25
E-16	1-90° BEND — 8' LONG (Width after bending 8 1/4") Smooth both sides	2.25
24 INCH DESIGNS —formed from 24 inch widths 8 and 12 feet long—3/16 inch thick		
B-24	2-90° BENDS — 8' LONG (Width after bending 18 3/4") Smooth outside Smooth inside	3.85
C-24	2-180° BENDS — 8' LONG (Width after bending 12 1/2") Smooth one side only	5.95
I-24	1-90° BEND — 8' LONG (Width after bending 21") Smooth outside Smooth inside	2.90
I-24-12	1-90° BEND — 12' LONG (Width after bending 21") Smooth outside Smooth inside	4.40
J-24	1-180° BEND — 8' LONG (Width after bending 16") Smooth outside Smooth inside	3.85
J-24-12	1-180° BEND — 12' LONG (Width after bending 16") Smooth outside Smooth inside	5.25
48 INCH DESIGNS —formed from 48 inch widths 8 and 12 feet long—3/16 inch thick		
B-48	2-90° BENDS — 8' LONG (Width after bending 41 1/2") Smooth outside Smooth inside	5.45
B-48-12	2-90° BENDS — 12' LONG (Width after bending 41 1/2") Smooth outside Smooth inside	7.65
D-48	2-90° BENDS — 8' LONG (Width after bending 41 1/2") Smooth one side only	5.45
I-48	1-90° BEND — 8' LONG (Width after bending 45") Smooth outside Smooth inside	4.50
I-48-12	1-90° BEND — 12' LONG (Width after bending 45") Smooth outside Smooth inside	6.75
J-48	1-180° BEND — 8' LONG (Width after bending 39 1/2") Smooth outside Smooth inside	5.45
J-48-12	1-180° BEND — 12' LONG (Width after bending 39 1/2") Smooth outside Smooth inside	7.65

Extra packing and crating charge at actual cost on orders for less than \$50.00
Terms: 2% 10 days—net 30, f.o.b. our plant Chicago

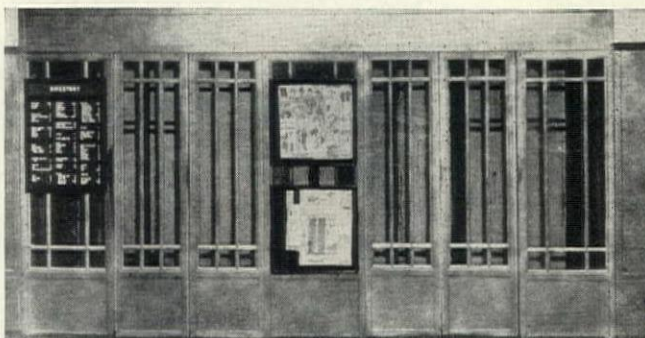


Effective window frame and background treatment

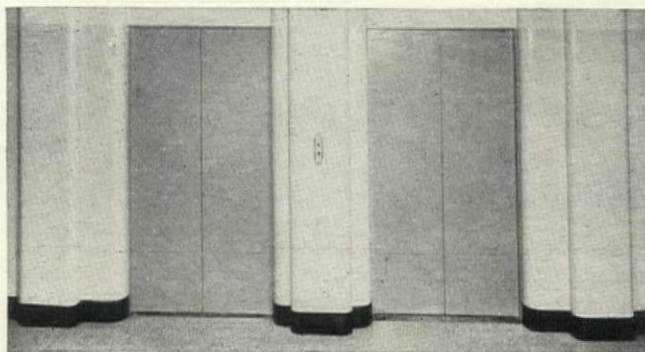
C. H. YEAGER CO., AKRON, OHIO

FOR ELEVATOR FRONT MODERNIZATION

These "before" and "after" illustrations tell the story of how effectively old type elevator fronts can be smartly modernized with Structural Bends.



BEFORE



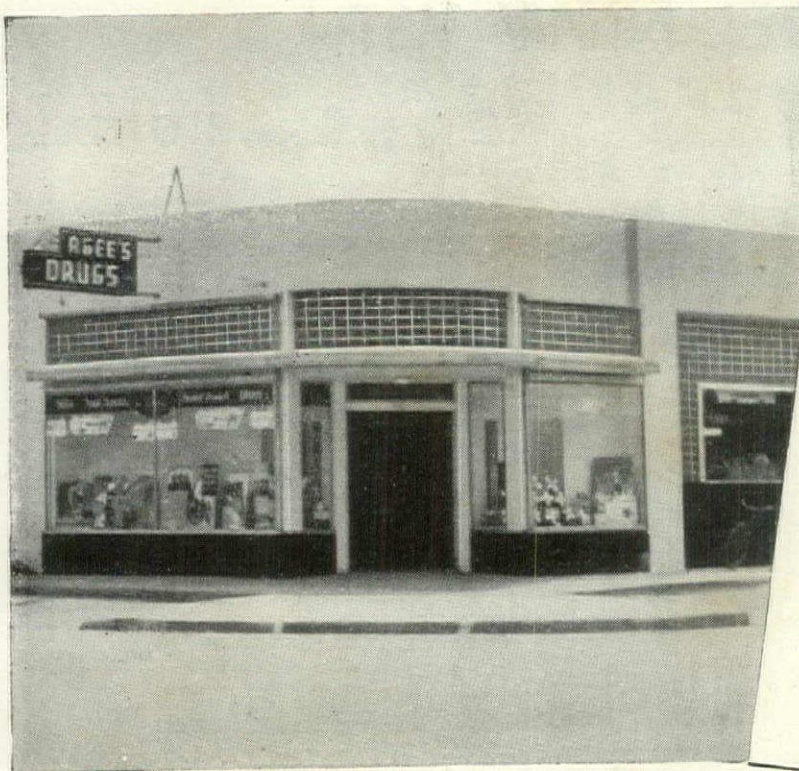
AFTER

C. E. CHAPPEL CO., SYRACUSE, N. Y.

AN ASSORTMENT OF SIZES AND
DESIGNS FOR EVERY PURPOSE



W. L. STENSGAARD & ASSOCIATES
346 NORTH JUSTINE STREET, CHICAGO 7, ILLINOIS



Texas City, Texas
April 14, 1944

Gentlemen:

The installation of a Servel "All-Year" Air Conditioning Unit in my drug store, located in Texas City, Texas, was completed during the summer of 1942. At the time the building was constructed, provisions were made for air conditioning, making the Servel installation simple.

The drug store is so situated that one street is not paved, resulting in an excess amount of work due to dust. The fine filtering qualities offered by the Servel unit quickly cleaned up this situation. The control of moisture is another fine feature of the unit. The cool, clean air circulated by this unit has been fine.

With our short heating season, the unit operates on cooling seven or eight months of the year. One may see that operating costs are a determining factor in purchasing air conditioning equipment for a drug store, and with the long life offered by the Servel unit, one may see why this unit was selected.

I recommend the Servel unit to others contemplating air conditioning.

Sincerely,
AGEE PHARMACY
By *[Signature]*

Texas City, Texas.

For commercial installations, too

Servel's New *All-Year* Gas Air Conditioner provides summer cooling, winter heating . . . with one simple unit

More than 350 successful installations have demonstrated that you can profitably specify Servel's New *All-Year* Gas Air Conditioner for many commercial buildings, as well as homes.

The letter above is typical of the enthusiastic testimonials received from banks, retail stores, offices and other commercial buildings where installations were made.

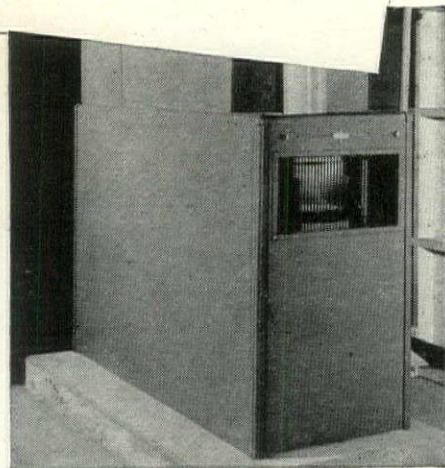
The Texas Harvest Hat Company, in Laredo, Texas, says: "By heating our office correctly in winter, by cooling it to an ideal temperature in summer, and by providing clean filtered air at all times, this Servel unit has provided complete comfort for employees working in the condi-

tioned spaces. It has enabled them to perform more efficiently and with less time lost due to illness."

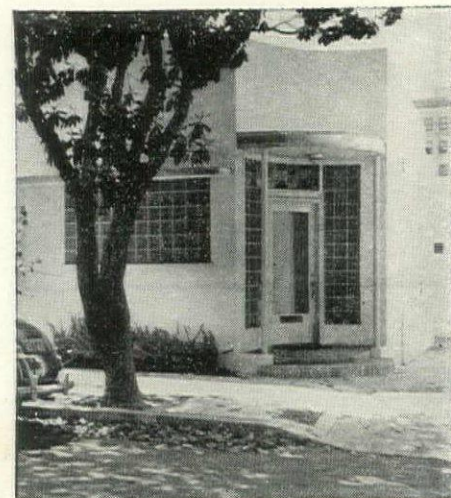
From the Oschner Clinic in New Orleans comes this report: "After eighteen months' experience with the Servel unit, we are most happy with the results given. We feel we have made a very wise and economical investment."

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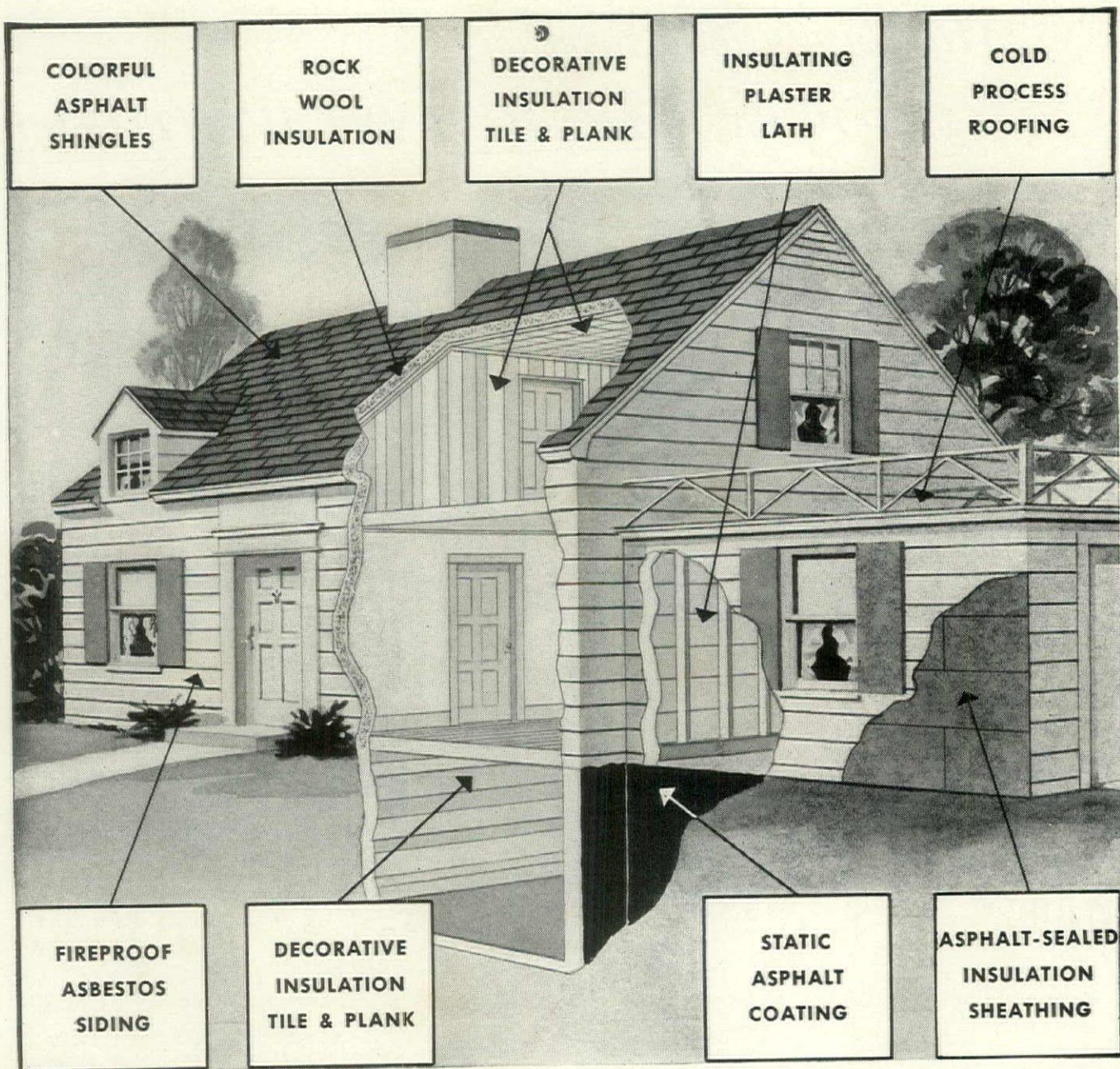
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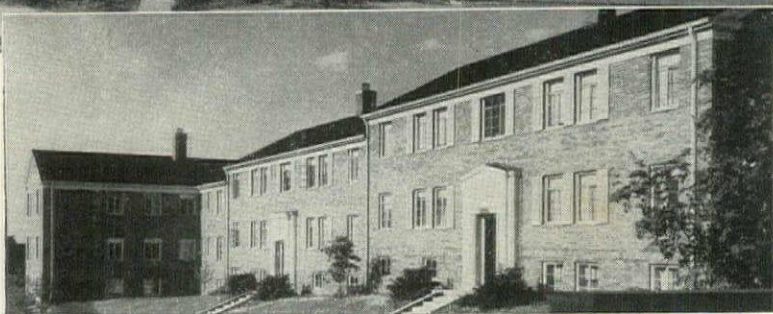
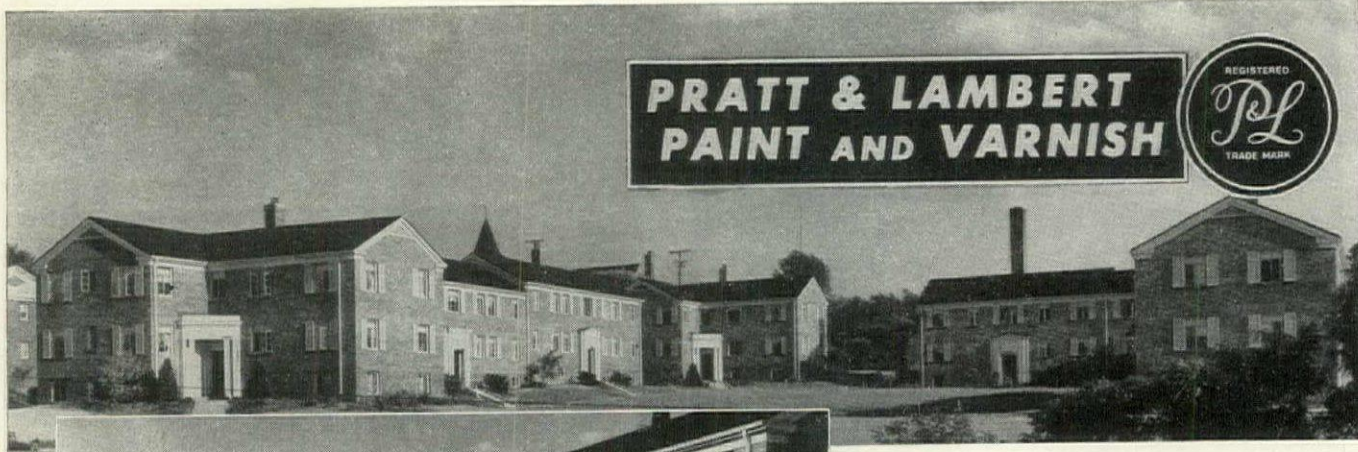
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C. A. KEYES, H. W. SHEPHERD, A. A. TREUHART, Owners
and Builders : MAXWELL A. NORCROSS, Architect :
MAURICE CORNELL, Landscape Architect : HERMAN
BESCHERNER, Painting Contractor, Cleveland, Ohio.

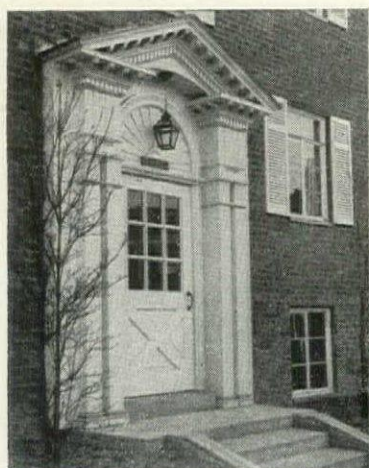
OVERLOOKING a deep, wooded ravine and park grounds, at Shaker Heights, Ohio, is this four-building apartment development, erected at a cost under \$5,000 per living unit. The 67 suites have thermo-static heat control, all-tile bath with tub and shower. On the three-acre site are playspots for children, parking space, and provision for future garages. All buildings are of masonry construction with tile roofs. Circulating hot water heat comes from a stoker-fired central plant.

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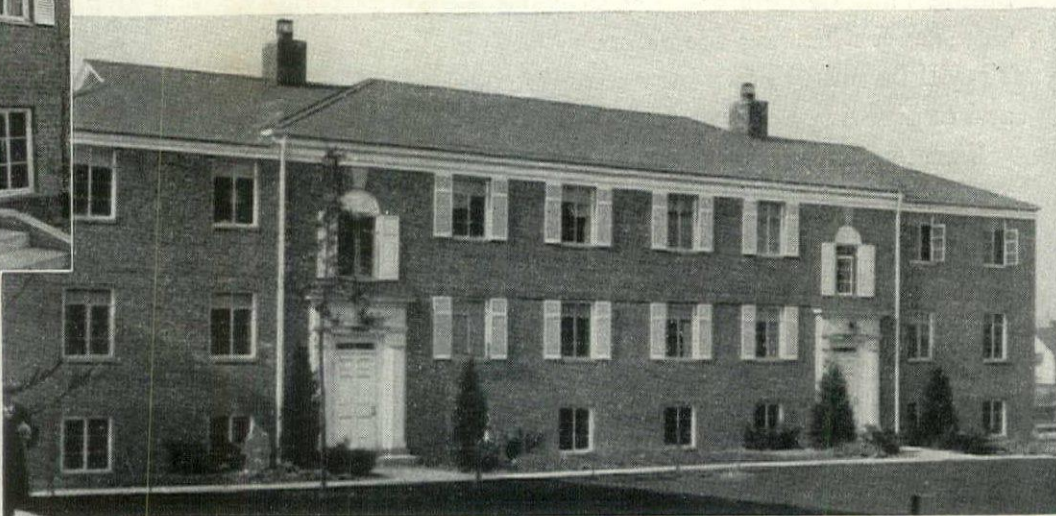
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HAROLD G. BURDICK, Architect (Shaker Parkway; above and right; 51 suites); MAXWELL A. NORCROSS, Architect (Shaker Garden, 46 suites; Shaker Colony, 39 suites). MAURICE CORNELL, Landscape Architect; LOUIS SPECTOR, Painting Contractor, Cleveland, Ohio

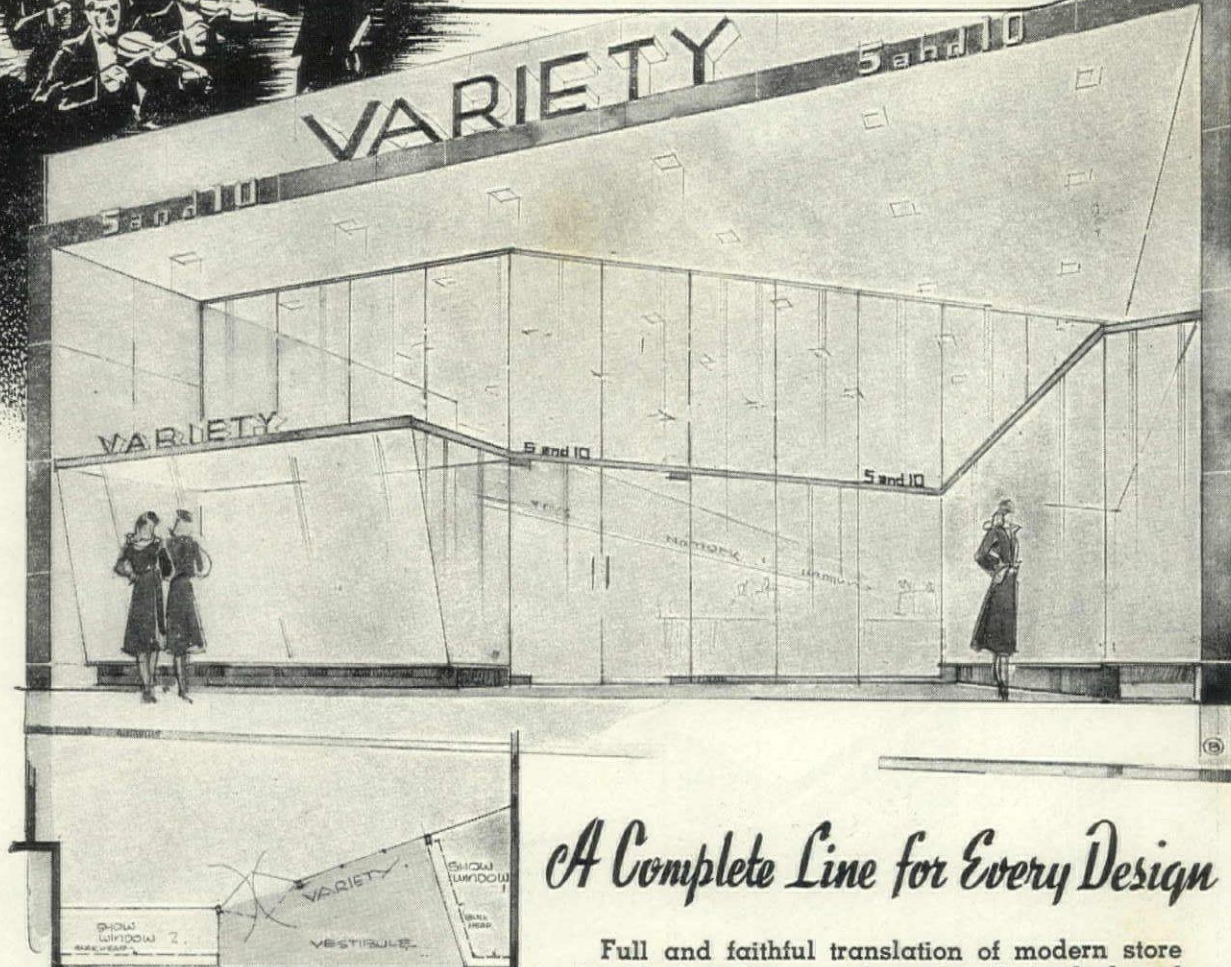
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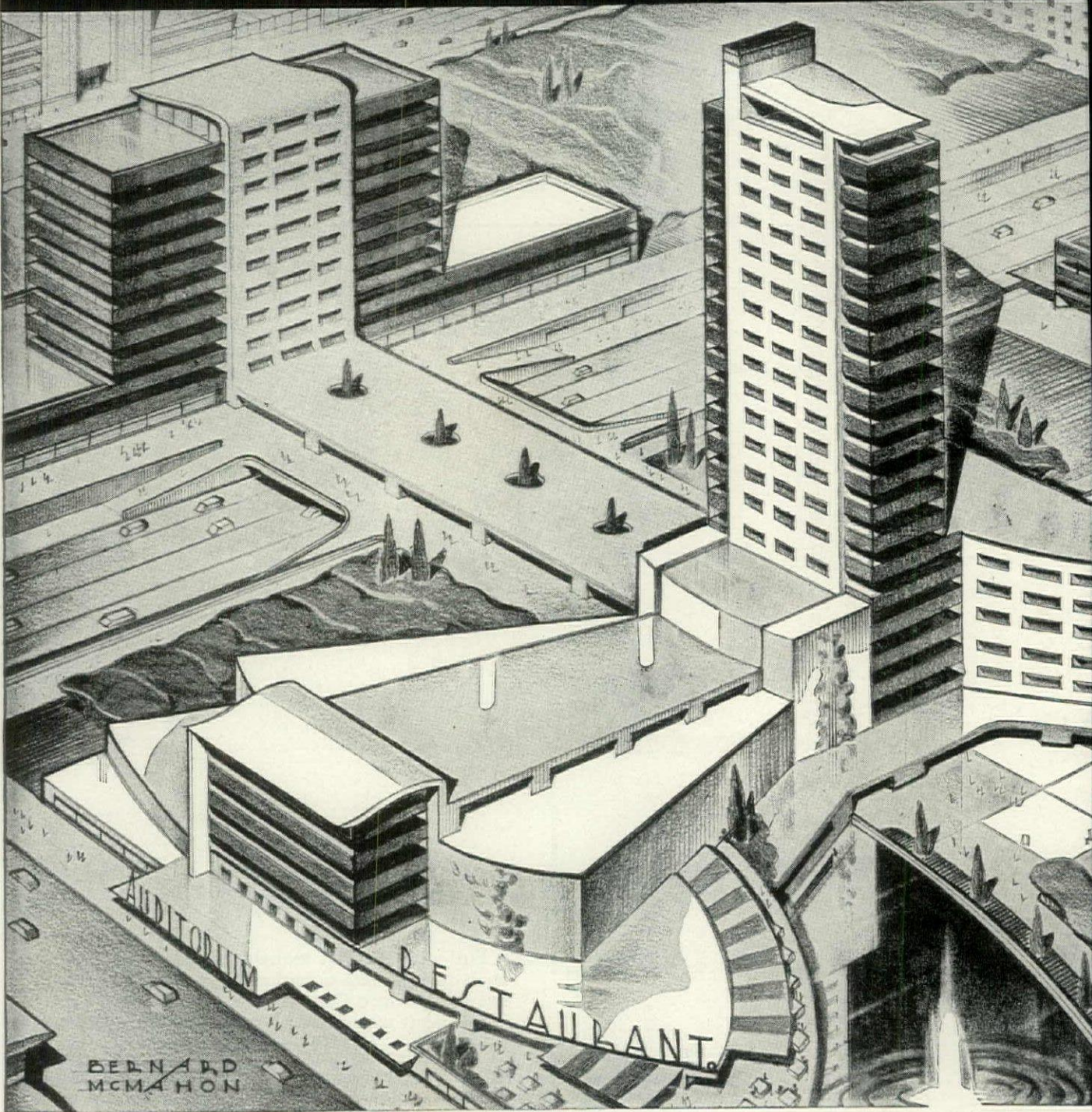
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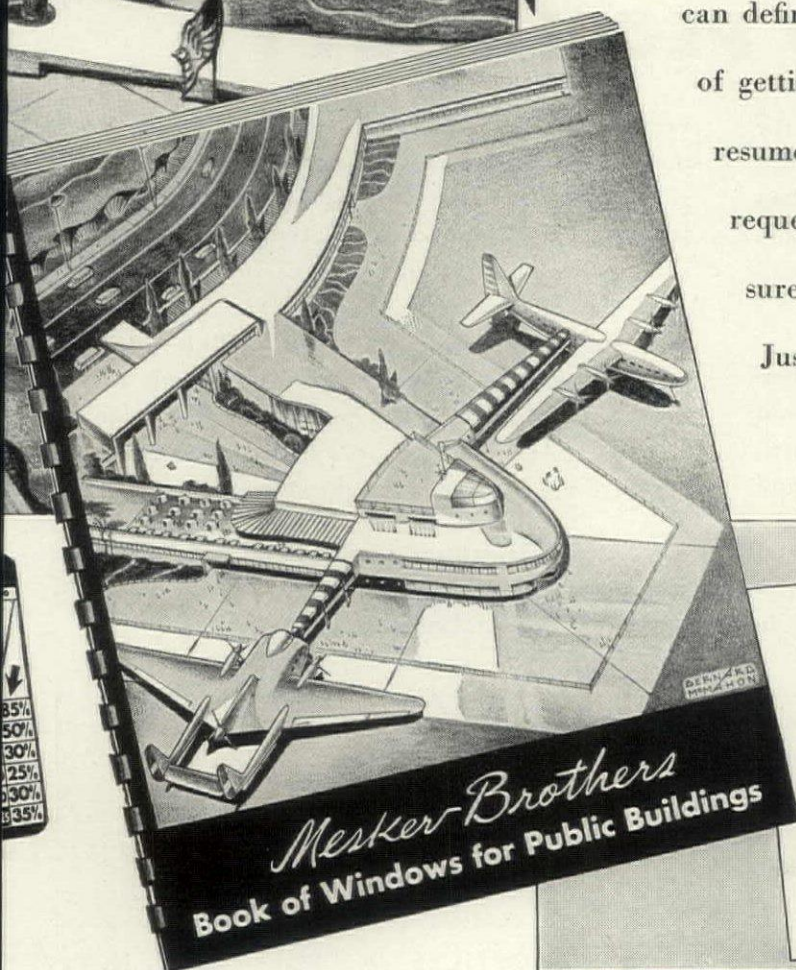
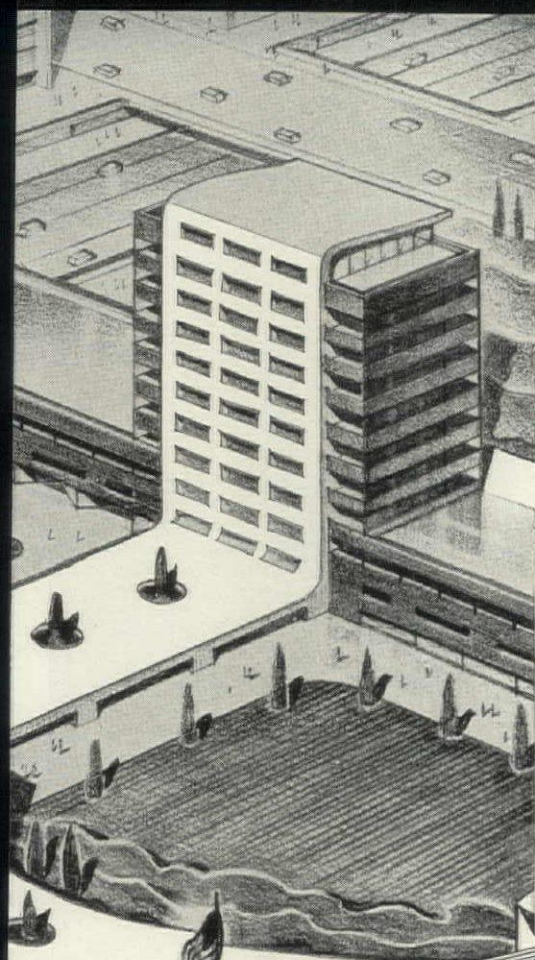


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MESKER	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
SASH-A	YES	YES	YES	NO	NO	YES	NO	YES	NO	YES	NO	NO
SASH-B	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
SASH-C	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
SASH-D	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES
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THE MONTH IN BUILDING . . . NEWS

Building reconversion order in the works (this page) . . . Remodeling clears WPB (page 76) . . . Building's share of full employment (page 76) . . . Federal dollars for local planning (page 78) . . . New assembly techniques turn out houses every 30 minutes (page 79) . . . One-package aluminum kitchen on the way (page 79) . . . Britain turns toward housing subsidies (page 168).

BUILDING STARTS

It was big news, and Building had waited for a long time to hear it. On Acting WPB Chairman J. A. Krug's desk last month lay the first major building reconversion order—an order that will, if Krug signs it, permit an immediate start for any construction not interfering with the war effort and not in a labor-short area.

September's reconversion news had moved almost as fast as the news from Europe. First came Chairman Krug's declaration that civilian production would be freed from WPB controls the day Germany surrenders. Next came word of complete repeal of L-41, the building restriction order, on X-day. There was loosening all along the line: a go-ahead for remodeling, more steel for stoves, coal stokers, mechanical refrigerators, more bathtubs. By month's end most of the WPB reconversion planners arguing for tight program control over building resumption had swung over to Chairman Krug's hands-off point of view.

But, hopeful as the news was, building's worries were by no means at an end. A great deal would depend on specific terms of the building reconversion order. And a great deal more would depend on builders' ability to buy equipment and materials in an uncontrolled market. Lumber was a large question mark. Would the Army and Navy soon see their way clear to release lumber from their immense stockpiles? There was some fear that a sudden easing of building restrictions might precipitate a buying panic in materials and equipment, with the attendant evils of hoarding and speculation.

Housing Controls Dropped. While these problems would have to be faced and solved, builders could look with assurance to a much better prospect for housebuilding than the National Housing Agency's tide-over program for H-2, or interim housing. (See ARCH. FORUM, Sept., Aug. '44.) Under the proposed building reconversion order, NHA

would exercise over-all quantity control of housing production, basing its quotas on amount of materials available. But restrictions on location, selling price, amount of materials used, room sizes would be dropped or greatly eased.

Since present WPB thinking promised that Building would soon be free to manage its own affairs, there was small disappointment over the Department of Justice's decisive thumbs-down on a Construction Advisory Committee, proposed to work with WPB on reconversion planning. After lengthy meditation (see ARCH. FORUM, Sept., '44), the Department had decided that the committee, representing both buyers and sellers, would have a semblance of anti-trust violation.

Equipment Promise. Although many building men still thought it would be fine to have somebody on the job at WPB—maybe a construction vice-chairman—to push the matter of building equipment, there was good evidence that the equipment producers were not being left out of the general turn toward reconversion. There was, for example, aluminum-maker, R. J. Reynolds, who said he could have sink, stove, and refrigerator wrapped up in a single unit and on the market by spring.

And all over the nation there were signs that Building's customers thought it would not be long before they could move into a new house—or a new plant. Rochester, N. Y. reported a lot-buying boom that topped all records for the last ten years. In Chicago, William Wrigley, Jr., put architects to work on plans for three new chewing gum plants. In California, an imaginative architect had buyers lined up for a desert subdivision where hangars would replace garages.

Bulging U. S. There were also plenty of signs of how much these new houses were needed. Acute apartment shortage in New York had helped to precipitate a black market in remodeling. In Denver, the apartment-wanted ads read like an agony column, and shortage of rental

housing boosted real estate purchases for the first half of September to a total of \$784,025—a figure exceeding any two-week period in the city's history. In Montana, one school superintendent promised to find a husband for any teaching applicant, but most simply tried to find housing, lack of which was keeping the teachers off the job, some of Montana's schools shut.

Postwar planning hurried to catch up. Three Colorado counties set up a joint planning commission, whose first job would be to work on building codes and zoning ordinances to cover unincorporated areas. St. Paul, Minn. called in industrial designer Raymond Loewy, planned a complete new face for its central business district. Postwar works planning got its biggest boost from the general reconversion bill which cleared Congress late in September, offering, for the first time in U. S. history, federal funds for local planning of public works.

TWO-THIRDS OF A HOUSE?

Construction costs are up 30 per cent over prewar levels and still climbing. The \$6,000 house was the popular prewar house—70 per cent of all home buyers in 1941 paid no more. But \$6,000 can buy only two-thirds as much house postwar as it did in 1941. Wages have climbed with prices; chances are that a lot of 194X buyers will want to pay a little more than \$6,000 for a house.

Geared to a period of depressed prices, the Federal Housing Administration has not yet adjusted its insuring facilities to a realistic picture of present housing costs. Few home buyers want to put up more than a 10 per cent down payment, most prefer a 25-year amortization period. But if postwar buyers want these mortgage terms, they will have to settle for a trimmed-down house. FHA will insure 90 per cent mortgages with a 25-year repayment period only on houses costing \$6,000 or less. Any portion of cost exceeding \$6,000 will be eligible for only 80 per cent coverage. More important: mortgage amortization period must be stepped up to 20 years. Builders fretted at what was likely to be a big hitch in marketing the fully-equipped, better-designed house that customers, in countless gallupolls, had declared themselves ready to buy. FHA, with its usual caution, gave signs of looking into the matter.

REMODELING GO-AHEAD

It all started in New York with a good deal of commotion about a booming, building black market, rent gouging, and a scramble for apartments unlike

anything the city had seen before. Black market operators sold priority-controlled building materials under the noses of WPB inspectors, while conscientious owners waited for a remodeling permit that would put a few more rental units on the market. Even respectable New York University, Trinity Church and the New York Housing Authority were labeled rent gougers as explosive Mayor Fiorello LaGuardia charged into the fight about widespread increases in commercial rents. Residential owners, most of whom had hopefully added an escalator clause to fall leases, got a brisk turn-down from OPA on their impressively documented petition for a 10 per cent boost of the city's rent ceiling.

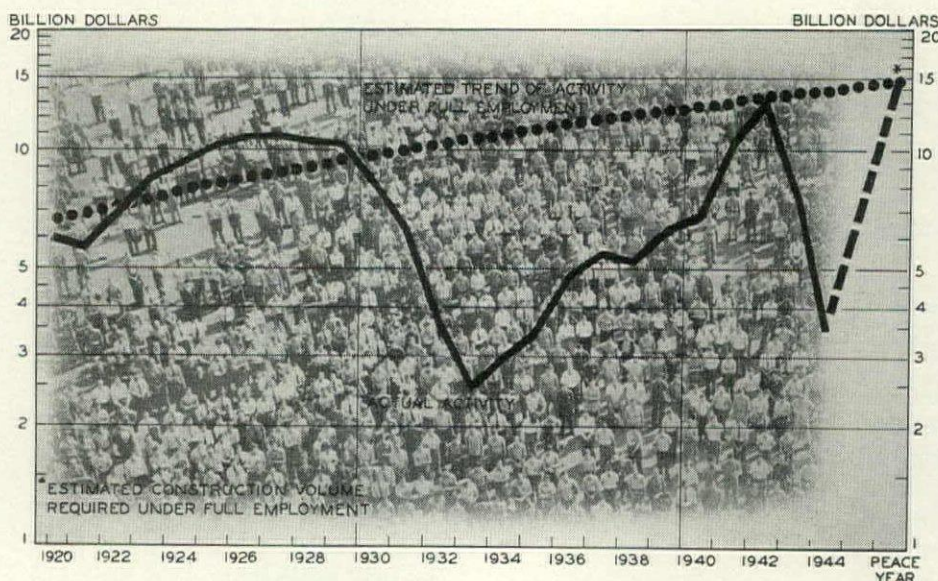
By mid-month New York's plight had helped to shake loose WPB's remodeling controls. Remodeling that would supply additional living units could go ahead in housing-short areas, WPB said. The National Housing Agency, which must designate the areas, promptly named New York, planned to name a good many more. This was good news, but better was on the way. Under L-41 only remodeling amounting to not more than \$200 for a single-family house and \$1,000 for a multi-family structure is legal without a WPB permit. By month's end WPB hinted that it would soon lift these cost limits to \$1,000 and \$10,000, respectively, opening the way for a substantial amount of remodeling with no fuss about a permit.

FLY-IN SUBDIVISION

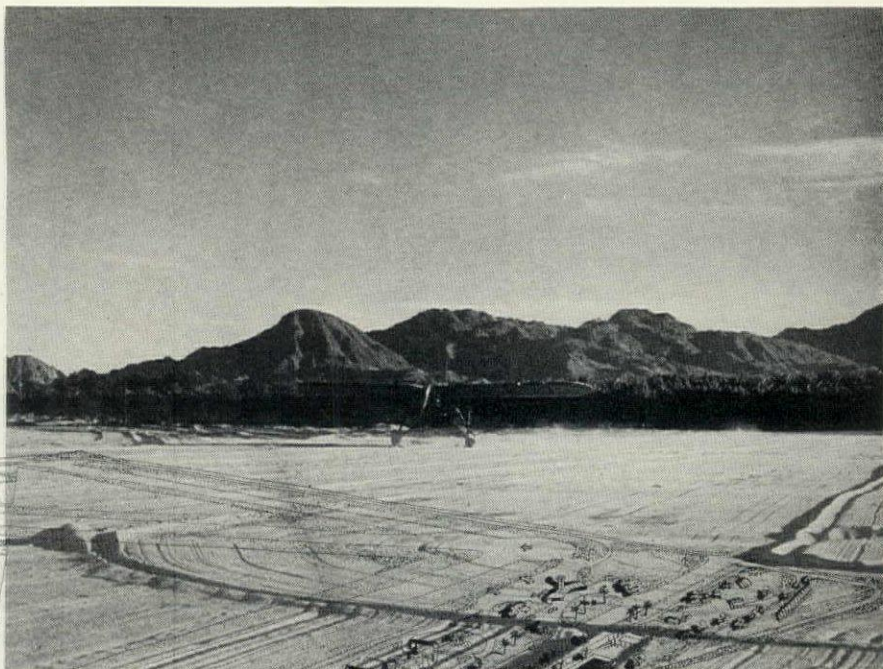
Henry L. Gogerty of Los Angeles is undoubtedly the only man in the U. S. who has settled on an 80-acre tract of sand, lost in the vast stretch of California's Imperial Desert as the place to start building a subdivision as soon as L-41 controls are lifted. Gogerty's site plans call for runways instead of roads, hangars instead of garages. Stretching down the east side of the development will be a wide concrete airstrip, with feeder runways from each homesite, ending in a triangle landing field fronting a community air service station.

Gogerty, an architect who has flown his own plane for 15 years, has already shown blueprints to "a score or more" potential clients interested in owning both a small ranch and an airplane. Development cost, which he will finance himself, Gogerty puts at \$250,000. Ranch tracts will sell for \$400 an acre. For land, building, and a pro-rata share of the runway cost, ranchers will pay from \$10,000 to \$15,000. With well water in abundance in this part of the desert, Gogerty believes buyers can soon make enough from date or citrus ranching to cover the cost of the property.

The notion of a ranch subdivision came to Gogerty one day in 1937 when he was flying over the desert on his way to a construction job. Shortly before Pearl Harbor, he began to talk about the subdivision to other plane-owners, business men of moderate finances, and



BUILDING MUST EXPAND 100 PER CENT in each of the next two years, if it is to bear its share of the national goal of full employment, according to this chart prepared by WPB. Statisticians have traced an hypothesis of construction volume that would have yielded full employment for building labor over the last 20 years. Only from 1922-1928 and once again in 1942 did actual construction volume reach this level. WPB figures Building's full postwar employment load at about 2,500,000 workers, basing this on construction's past relation to the national output. But Building will have to hump—it has never yet climbed more than 46 per cent in any one year.



DESERT SUBDIVISION will be laced by air-strips, supplied with hangars. Developer Henry Gogerty already has customers for ranch homes which he hopes soon to begin building on this 80-acre California tract.

found more than enough enthusiasm to get him started on plans and cost estimates.

Ranch homes will be in what Gogerty calls a "conservative modern" style, with both design and materials keyed to the desert climate. Hangars will be part of the house, with the hangar roof used either for a second floor patio or for additional bedrooms. At the west end of the tract, Gogerty plans four "Aerotels", each with four apartments and its own hangar, for vacationers.

Gogerty's conviction that the airplane is here to stay occurred as early as World War I, when he was a construction engineer in the Air Corps. Since then, he has designed a large part of the Imperial Valley's bigger construction jobs—schools, air terminals, public buildings, factories. His advice to developers: count in the airplane.

PROBLEM: UNSOLVED

Two influential opinion-molders button-holed the housebuilding industry last month. Each had more than a word to say about the matter of more housing for more Americans. Neither felt that the partnership in which government and the industry now work to meet housing need would be dissolved. Both were anxious to define carefully the terms of the partnership.

To a big mailing list, the Producers' Council sent a 96-page report, prepared by Frederick Babcock, vice-chairman of the PC postwar committee and formerly Assistant Administrator of the Federal

REPORT FROM RUSSIA

(John Hersey, *Time-Life-FORUM* correspondent now in Russia covering reconstruction, cabled this report.)

Russian reconstruction has three stages. The first corresponds to the work of our AMG. It follows immediately after occupation and consists of restoration of minimum living facilities. The second stage, which follows a month or two later, is a semi-permanent stage, characterized by temporary housing and emergency factories. And finally comes the long-range reconstruction, which is not rebuilding but complete replanning and new development—a projection of five-year plans of the prewar period.

Perhaps the most dramatic example of interim reconstruction is the small town of Istra near Moscow. This was a town of ten thousand, almost completely destroyed by German bombings at the time of the battle of Moscow. The town undertook to rebuild itself without any assistance from the State. First the townspeople, mostly women, built a sawmill entirely with what they could find in the area. Then they built a temporary town of wood. They expect to build a permanent city eventually, but for the time being Istra is jerry-built, like an American gold-rush town. When the townspeople finished their domestic carpentry they

converted the saw mill into the town's new industry—the making of prefabricated parts for houses in surrounding towns.

Temporary reconstruction is done with extraordinary attention to the details of long-range plans, many of which are already drawn up. For instance, in Stalingrad much of jerry-built temporary housing is on land which has been set apart for eventual parks.

The best evidence that the third phase of reconstruction is long range is that for 1944 Russia will do only 33 per cent of her new building in areas freed from the Germans, the other two thirds in the east. Industrial development in eastern Russia is getting as much attention in terms of rubles of the national budget as it did last year, which was a peak year. And in the west, for instance in the Donbas and Dnieper industrial areas, factory equipment which was removed is not being brought back. Instead new factories are being built.

One of the most important aspects of the third phase of reconstruction is electrification. In rural areas both liberated and uninvaded, this is going forward. In this, as in all things, the Russians are apparently patient people. One Armenian town has plans for hydroelectric development which will mature only after 75 years.

Housing Administration. Keynote of PC thinking about government and industry teamwork, as struck by Babcock: "It is inevitable that government, at all levels, will participate in housing matters . . . Governmental facilities should be used

in meeting housing problems only as a last resort . . ."

PC is still plugging away at its favorite notion: that private enterprise may eventually be able to operate a mortgage insurance system comparable

to that now offered by FHA. Meantime, Council spokesman Babcock feels, a yield insurance plan should be added to FHA operations.

Mrs. Samuel Rosenman's determinedly open-minded National Committee on Housing also produced a lengthy set of recommendations, intended to "coordinate the activities of all sections of the home building industry and of the governmental agencies concerned." The Committee, which is something of a specialist in coordination, thought that these things might help everybody quite a lot:

- ▶ Municipal surveys of need to chart the course of housebuilding activity.
- ▶ Statewide conferences between FHA, the Federal Home Loan Bank Administration, and the industry for the purpose of achieving better standards and practices.
- ▶ Permissive state legislation for joint administrative bodies that will enable municipalities to cooperate in planning and subdivision control.

Both groups earnestly entered the familiar tilt with the financial windmills that surround the problem of urban redevelopment. Said PC: "It is difficult to view favorably any suggestion whereby the federal government is to furnish or lend funds to acquire blighted areas because of the implied federal control over an essentially local problem." Agreeing that subsidy will be necessary to cover high land costs, Mrs. Rosenman's Committee simply said, "Where that subsidy is to come from is a major unsolved problem." Good point made by the Rosenman group: public works, wherever possible, should be tied in as a contribution to urban redevelopment.

DOLLARS FOR PLANNING

Public works planning was lagging. Last month cities and states had less postwar work on their drafting boards than they had last spring. This was the gloomy report of federal men checking local postwar planning progress. Reason: many localities were stalling on plans, waiting for the federal dollars for advance planning promised by the hotly contested reconversion bill.

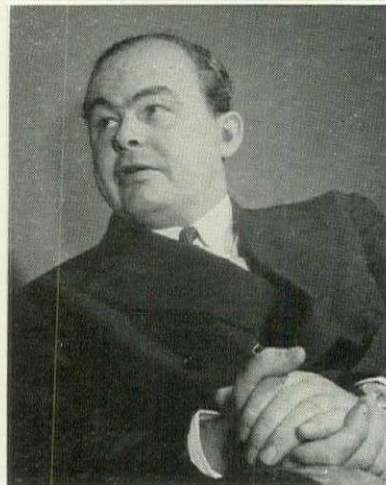
Late in September the long-rumored federal dollars were fact. Never before offered by the federal government, advance aid for planning means that local public works needs can be carefully surveyed, long-range construction programs carefully developed. Heretofore, federal funds for the plans have been packaged with the appropriation for construction; when shovels might have

BARGAINING WILL BE HARD

U. S. planners, lost in a thicket of high urban land values, have found Great Britain's rebuilding proposals breath-taking. Has England's older economy found a way out of the tangle? Geoffrey Crowther, editor of Great Britain's most influential journal of opinion, the 100-year-old *Economist*, thinks that there is good hope for substantial land use reform within England's existing legal and financial framework. But Crowther, in a special FORUM interview, reminded that Britain's present coalition government has not yet displayed much evidence of getting down to business on specific ways-and-means. Meantime, "a central set of fanatics" bent on radical changes in land use threaten to wreck useful, if compromise, legislative steps in the right direction.

"The rosy glow of utopian thinking about land use does more harm than good," Crowther said. "Those planners who would, for example, have half of London moved out have not told us how they propose to accomplish this. Are we to write a letter to Mr. Smith of Bloomsbury and tell him to go and live in Manchester? Members of Parliament are briefed by all sorts of impractical people who have small knowledge of the complexity of existing property rights and financing necessities. The recent refusal of Parliament's Labor members to approve a useful small bill for acquiring the land to rebuild bomb-damaged and slum areas because the whole system of land planning has not been worked out is an example of such impractical thinking."

Opposition to this bill, now being revised in Parliamentary committee, was bolstered by local authorities who felt that the national Treasury should be called on for more substantial help than was proposed. This controversy has, of course, its counterpart in U. S. arguments over federal aid for urban redevelopment. "Plymouth's excellent rebuilding plan," Crowther said, "calls for



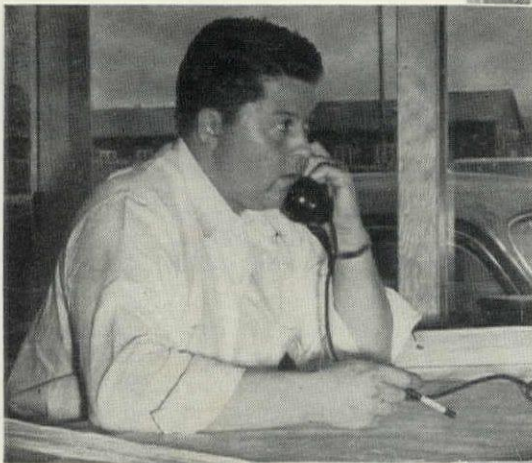
Myron Ehrenberg

CROWTHER dislikes Utopians

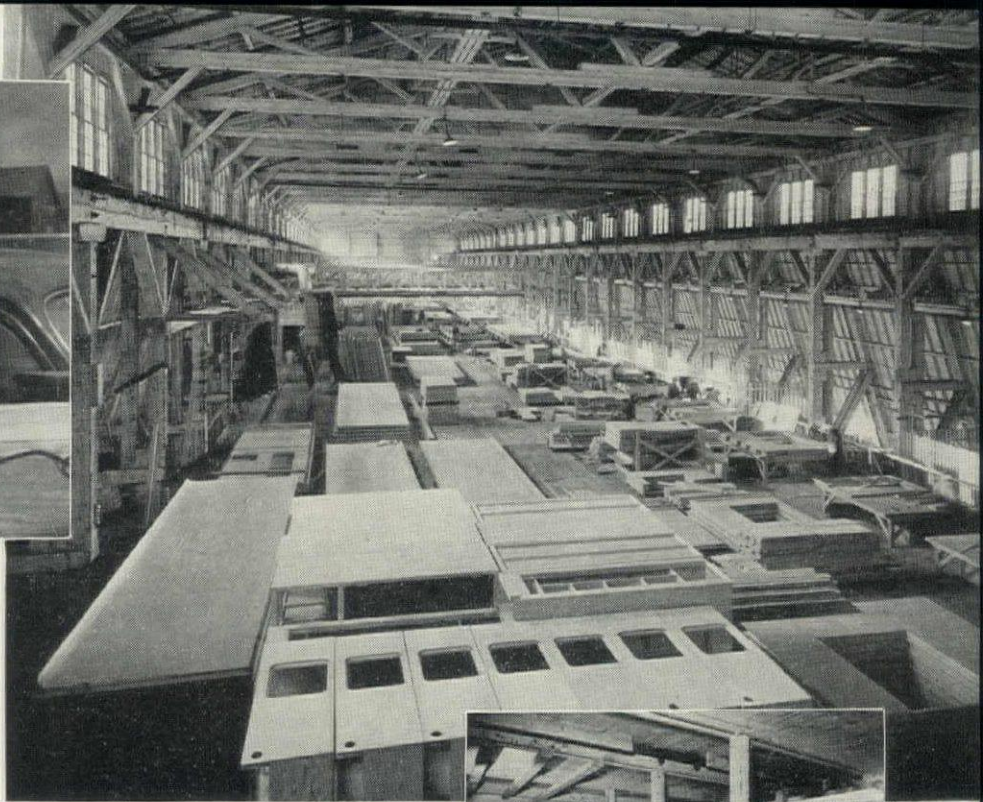
a large part of the cost to be paid by the central government. There is a good deal of feeling that no large amount of national funds should go into special amenities for the people of Plymouth. On the other hand, it wasn't Plymouth's specific fault that it was bombed. This kind of problem will, in the last analysis, be a matter of hard bargaining between the cities and the Treasury."

One big thing Britain has learned from the war and from the 20 years of "depressed areas" that followed World War I is to think less about the mobility of labor and more about the mobility of industry. "Broadly speaking, we have found out that you can make anything anywhere and that there is less social waste in moving industry than in moving people. As yet we have only negative controls. The government may forbid an industrialist to locate a plant in London, but haven't yet screwed up their courage to the point of telling him where he may build it."

Crowther, who got part of his education and a wife in the U. S., once worked in Wall St., is also the editor of a recently launched monthly magazine, *Transatlantic*, whose sole purpose is to explain Americans to the often incredulous British. Circulation, he said, is going well.



18 HOUSES EVERY 9-HOUR DAY is record of Robert D. Johnson, head of Oregon's Prefabricated Engineering Co. This prefab plant stretches 780 ft., has 110,000 sq. ft. of floor space. Four assembly lines are served by a 10-ton, 80-ft. overhead bridge crane. Read down for the assembly line that produces the TVA sectional design, bulldozer dumping section at site, and complete unit, which Johnson is now selling to the War Dept.



been turning on foundations, architects were just beginning to sit down at drafting boards. Under the new plan, interest-free federal advances will be made for planning, deducted from any future allotment made for construction. No advance is to be construed as a promise that there will be such an allotment. If there is not, states and localities will have nothing to pay back.

HALF-HOUR HOUSE

Every thirty minutes a three-room prefabricated house rolls off one of the four 600-ft. assembly lines at the Prefabricated Engineering Co.'s plant at Toledo, Ore. It takes ten minutes longer to turn out a four-room house.

With a big War Dept. order in hand and a careful eye on the postwar market, Prencos head, Robert F. Johnson, is not anxious to do much specific talking about the improved assembly techniques responsible for a production record that comes close to the pace of automobile manufacture. One of them: painting and quick-drying sections on the line. Working one nine-hour shift, 400 men man the assembly lines.

Using the Tennessee Valley Authority's sectional plan, Prencos has made only minor design changes. One important time-saver is inclusion of thermostatically controlled electric heating units—eliminating TVA's plans for alternate use of gas, coal or wood. Each section is complete from roof to wiring and plumbing fixtures when it leaves the line. Sections hauled by motor trailer stop at a Portland furniture factory, arrive at the site equipped with 30 pieces of furniture. Walls are of plywood; framing lumber is supplied by the C. D.

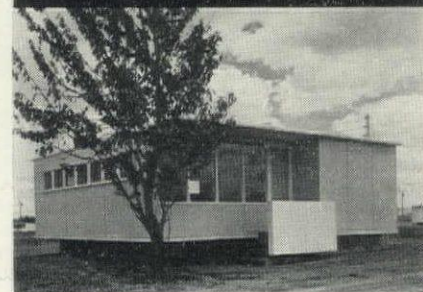
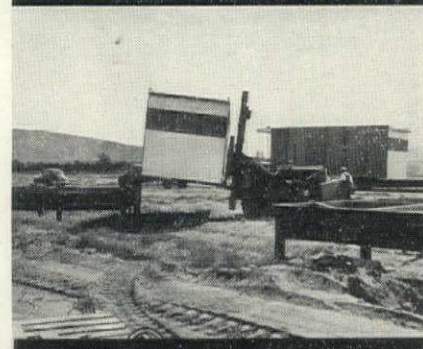
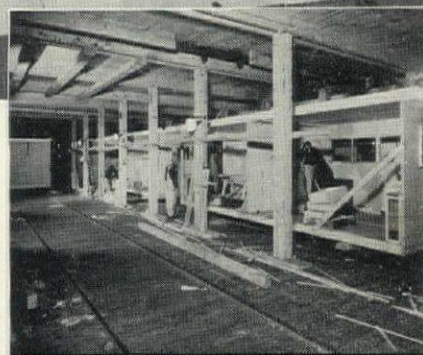
Johnson Lumber mill, which is next-door to Prencos plant.

A prefab newcomer, Prencos went into operation in 1942, but Robert Johnson and the firm's engineer, Russell E. Dahl, have been experimenting with the mass-produced house since 1936. Design chief Arnold Southwell helped to develop the Moduluk system of panel construction, which the firm uses in producing military hospitals and barracks.

Prencos has already sold 2,000 of the TVA units to the War Dept., none, as yet, to anybody else. On the basis of present material costs, Johnson estimates that price to individual buyers would be \$1,800 for a one-bedroom unit, \$3,000 for the three-bedroom unit. Prencos looks forward to a big postwar market for summer homes on Western streams and beaches, plans to sell units on a short-term financing plan like the automobile contract.

KITCHEN SUCCESS STORY

R. J. Reynolds, who now produces about one-fourth of the national supply of aluminum, and Guyon L. C. Earle, a Long Island real estate man with an inventive turn of mind, are both characterized by a singular indifference to the voice of majority opinion. When foil-maker Reynolds set out in 1940 to invade the hitherto unchallenged production monopoly of the Aluminum Company of America, there were plenty of experienced production men on hand to warn him that he would lose his shirt. But Reynolds sold his aluminum production plans to RFC to the tune of some \$40,000,000 backing, today produces more aluminum than did the U. S., England and France combined in



NEWS

1939. When in 1938 Earle began thinking about an integrated kitchen unit that would at once yield more efficient refrigerating facilities at less kilowatt cost and combine them with sink, stove and adequate cupboard space, there were a number of experienced refrigerating engineers who assured him that his notion would never work. Earle, who had neither the advantages nor the prejudices of formal training in design or engineering, went right on experimenting in his basement workshop. Last month Reynolds went down to Earle's basement workshop, came up with plans to put three of his 40 plants into production of the kitchen unit by early 1945.

In this happy alliance, the *Reader's Digest* had acted an unwitting go-between. Earle had long been enchanted by the notion of making his unit out of aluminum, but, until he read the *Digest's* version of the iconoclastic swathe which Reynolds had cut in the industry, had not hit on what seemed to him a proper man to back it. One look at the kitchen unit was enough to convince Reynolds, who has been finding one answer after another to Jesse Jones' question—"What are we going to do with three billion pounds of aluminum a year after the war?" (Among them: an improved type of aluminum insulation, which Reynolds first introduced in 1934.)

With controls lifted on aluminum and steel (for the counter top) in good sup-

ply, only materials tough spot in kitchen unit production will be compressors. But Earle, who has joined Reynolds' firm to work on the tooling job, believes there will be enough of these to get the unit on the market by next spring.

Since the unit packs all kitchen equipment into seven or nine feet of wall space, Earle expects it to have a big market for use in small apartment kitchens. He figures that, in an 8 x 9 ft. kitchen, the unit would mean 33 per cent more dining and working space—plenty of room for a table and chairs. The unit has 9 cu. ft. of drawer-type refrigeration space, includes such special amenities as dish and towel drying compartments, operated by waste heat from the compressor. The stainless steel double sink is welded to the steel counter top, eliminating crevices. Refrigerator drawers are designed to minimize heat leakage, close by gravity when pushed within an inch of the opening.

Present thinking puts selling price of the unit under \$300 for quantity deliveries. But there will be cost-cutting on every front. Aluminum itself now costs 15 cents a pound, against the prewar price of 20 cents. Designed for assembly-line production, the unit, according to its inventor, also permits simplification of tools and dies. Cost of shipping, merchandising, and servicing a single unit would logically be less than costs for each separate piece of equipment.

Production and marketing will be handled through a Reynolds Metals Co. affiliate, the Richmond Radiator Corp.

LABORATORY JOB

Recommended by every specialist who has thumped housebuilding's sagging chest over the last decade, comprehensive technical housing research may soon reach a legislative birth. Joint fathers: Senator Robert Ferdinand Wagner, whose interest in low cost housing dates back to a childhood spent in the slums of New York, Senator Harley Martin Kilgore, whose confidence in the miracles of technology has inspired an unflagging interest in federal research.

Committee hearings, soon to begin, will be held jointly by several Congressional Committees to speed passage of S. 2046, the bill providing for an Office of Housing Research with adequate funds to undertake broad research for improving the production, fabrication and construction of the nation's housing. The bill provides that any invention resulting from publicly financed research will belong to the U. S. Not less important than the Office's own research endeavors would be its correlative program for coordinating the many kinds of specialized studies in housing technology now being undertaken by manufacturers, universities, foundations.

Under the strong lens of Senator Joseph O'Mahoney's Temporary National Economic Committee in 1941, the industrial giant that is housebuilding dissolved clearly into hundreds of thousands of small business enterprises. Seat of most of the industry's woes, this well-publicized fact is also the reason why housing product development has never been gilded by the research magic that emanates from the million dollar laboratories maintained by the bulk of U. S. industry. TNEC diagnosticians R. Harold Denton and Peter A. Stone summed up the lack of research impetus: "Contractors operate upon too small a scale to carry on research . . . No single manufacturer produces a very large proportion of the materials used in a house. . . . No manufacturer is interested in the house as a whole, and none of them has been willing to spend money upon industrial research of a comprehensive nature."

The TNEC probings released considerable steam back of a proposal for federal housing research, but the war emergency shunted an O'Mahoney-sponsored bill off the legislative tracks.

Over-all federal research expenditures have zoomed with war expenditures. Investigating the government's research

(Continued on page 162)

Saves time • space • energy • money...

EARLE KITCHEN UNIT in
FACTORY • NORMAL • SHOP • TRUCK

Myron Ehrenberg
AP Photo

ALUMINUM UNIT KITCHEN, designed by Guyon Earle (top) will be in production by early 1945, backed by aluminum-maker, R. J. Reynolds. Earle's L-shaped drawer refrigerator (see Arch. Forum, Aug., '43) is equipped with an enormous meat compartment, racks for 16 bottles, a freezing unit holding 96 ice cubes, special compartments for frozen foods. Complete with stove and sink, the unit will cost about \$300.

COMMERCIAL REMODELING

Prescience was never more fully rewarded than with the appearance of this issue of *THE FORUM*, devoted to remodeling, just as the government announces its first release of building materials from wartime controls. To be sure, commercial remodeling, the subject of this issue, is still under restriction, but many see in the present relaxation Step I in a program which will open building opportunities of many kinds as soon as the European war ends. The November issue, a companion to this one, will deal with residential remodeling, already restriction free in many areas. Thus, these two *FORUM* issues have great currency because actual remodeling soon will be possible in communities where there are neither labor nor material shortages.

For too long remodeling has been the stepchild of the building business. Those who deal with urban rehabilitation in its larger aspects are tempted to scorn the realistic fact that we must recognize the legacies of the past and that in many instances it is both practical and economical to modernize rather than to demolish existing structures.

The financial problems and the design techniques involved in successful remodeling challenge our best talents. Where once this field was dominated by a heavy-handed, commercial approach, it is now becoming widely understood that conversion of old structures into quarters which compete in facilities and in appearance with their modern counterparts, demands competence and ingenuity. A review of the material in this issue makes clear that remodeling is a major assignment.

It is also evident that store design has made big strides forward. The distracting, eye-catching store "architecture" of ten years ago has been junked in favor of systematic study of consumer appeal in terms of display techniques, lighting and mechanical equipment. The shop front, for example, has undergone revolutionary changes. The old-style front in which display windows flank the entrance vestibule is on its way out. New types are coming to the fore: the billboard window, with its narrow strip of display space for small objects like jewelry and accessories (page 104); the open front, which affords maximum visibility of the store

interior (page 92). In some cases the designer has literally dispensed with the formal window while retaining glass as a transparent enclosure. Illumination has been elevated to an exact science employing an artificially extended scale of light values to focus attention on the merchandise (page 129). Restudy of store layout in relation to sales has resulted in many changes. Silverware, for example, is no longer placed next to the jewelry counter but is included with home furnishings where the housewife can make her selections along with other household equipment. Light, portable display equipment makes possible seasonal changes in allocation of space (page 84). This new orientation has challenged the designer's abilities and at the same time has given him a freedom which he may not have found in other types of work.

The selection of jobs aims at the widest possible coverage, from the select dress shop to the supermarket, from bar to office interior. Even in those examples where sales to the consumer are not a factor, the same attention to detail and appearance which marks the store designs is evident. Particularly in the office field this is a notable new development. Built-in lighting and furniture, attractive colors and materials and specially designed equipment are found as frequently in the offices illustrated as in the stores, and are also making their way into the industrial field, as shown by the two examples of such work included.

In one respect the material presented falls short of the standard which must be met in the postwar period. Almost all of the work is fragmentary. Individual buildings which have been remodeled without reference to their neighbors, interiors which provide a controlled environment limited to the confines of a 20 by 40 ft. space, handsome displays which are all but "blacked out" by parked cars, are among the penalties of the piecemeal approach. In short, no matter how brilliant the individual solution, it often suffers in its splendid isolation. How true this is can be seen by referring to the project for remodeling the main street in Niles, Michigan (page 100). Here is no one-shop solution, but a unified reclamation of a complete city block in which each individual store not only gains from its own transformation, but borrows from its spruced-up neighbors new vitality and attraction. It serves to illustrate, once again, the prime importance of remodeling in the postwar picture: it is only through such a wholesale approach to our *existing* buildings that we can hope to change substantially present patterns of urban building within a reasonably short time after the war. And only through such changes, multiplied by ten thousand Main Streets, can we hope to alter our basic business environment.

WOMEN'S APPAREL STORE. Skidmore Owings & Merrill's treatment stresses display flexibility.

CHARLES A. STEVENS & CO., CHICAGO, ILL.

The sale of women's wearing apparel, constantly subject to capricious fashion dictates and overlapping seasonal changes, requires correspondingly flexible display facilities. Before remodeling, the coat and suit department of this store had rigidly divided merchandise grouping. Stationary stock and show cases created barriers which interfered with the seasonal fluctuation in the stock of various types of clothing. Analyzing the situation, the architects found that by turning the department into one large sales area, the furniture and some movable fixtures could be grouped to subdivide the department according to the merchandising requirements of the moment.



STATIONARY PARTITIONS DIVIDED SALES AREAS BEFORE REMODELING

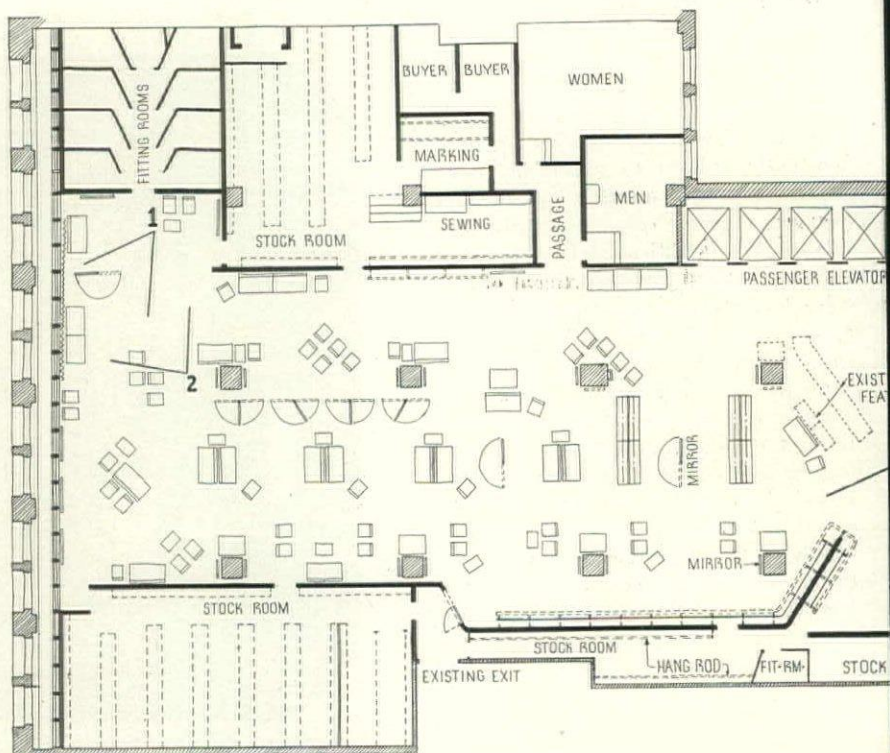
SIMPLE TUBULAR METAL RACK PROVIDES BETTER VIEW OF MERCHANDISE, IS APPROPRIATELY SUBORDINATE TO IT



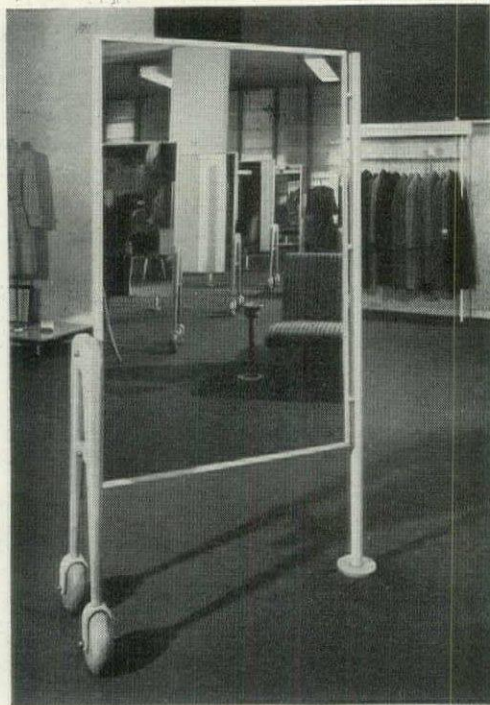
Because of its spaciousness and ample provision for stock, fittings and alterations, the original plan needed no significant changes. The most important structural addition was a louvered Thermolux screen in front of the windows which diffuses the light and introduces a major new design element.

A combination of metal tube and upholstered furniture was used. The metal tables have glass tops; chairs are upholstered in striped and solid tapestry. The absence of bulky overstuffed pieces adds to the feeling of spaciousness. Specially designed display pedestals raise the mannequins a few inches off the floor—enough, however, to attract attention from a distance.

Walls are of plaster and V-joint sand blasted oak. Birch, the wood used for the furnishings, is repeated in the doors, trim and screen frame.



PORTABLE MIRRORS SWING ON CENTRAL PIVOTS. BOX LIGHTING FIXTURES AT RIGHT ANGLES MINIMIZE CEILING B

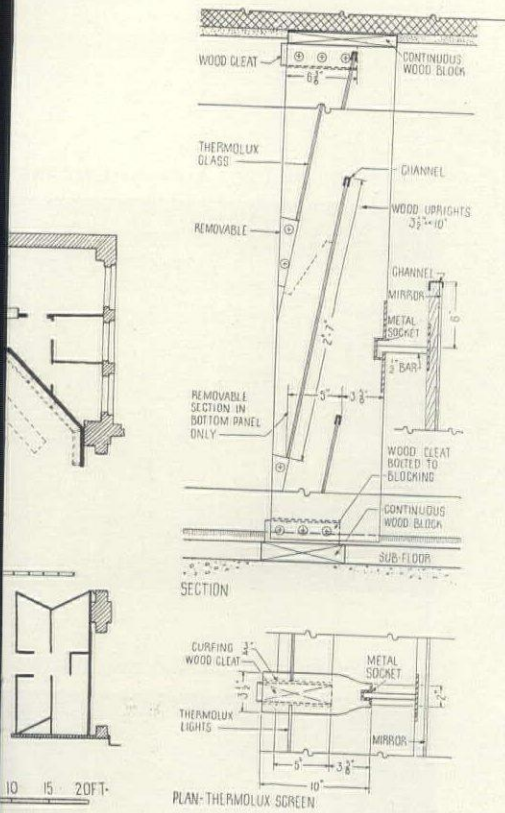


FINISHES AND EQUIPMENT: WALLS: Plaster, V-joint sand blasted oak. PARTITIONS: Thermolux glass—Pittsburg Plate Glass Co. SHOWCASES: Garland Furniture Co., Jewell Mfg. Co. HARDWARE: Midwest Hardware Co., Garden City Plating and Mfg. Co. PAINT: special colors—Wheeler Paint & Varnish Co. Other paint—Pratt & Lambert Inc. LIGHTING: Westinghouse Electric & Mfg. Co., Jewell Mfg. Co. AIR CONDITIONING: Carrier Corp.



res and lightweight furniture a necessity. Existing structural features remained unchanged.

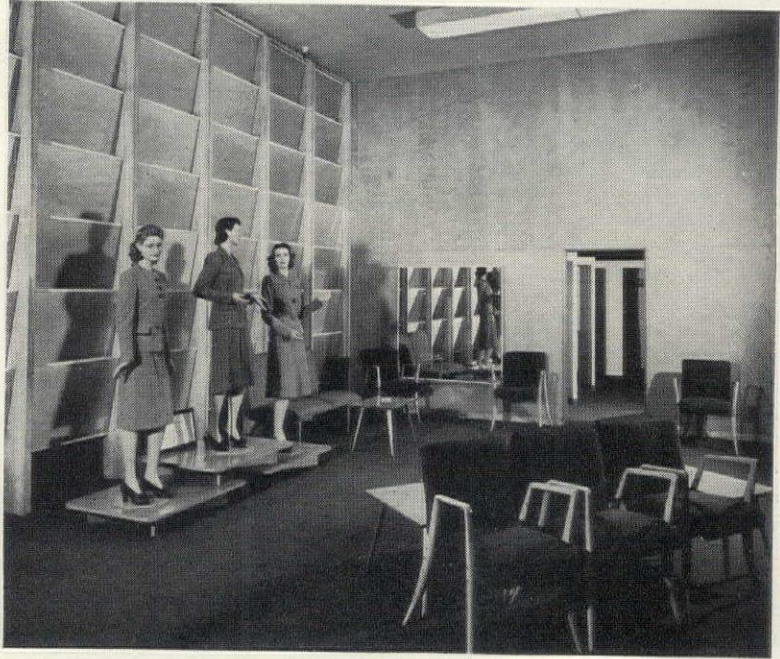
Photos: Hedrich-Blessing



VIEW 1.



VIEW 2.



VIEW 3.



FURNITURE IS USED TO SEPARATE DEPARTMENTS

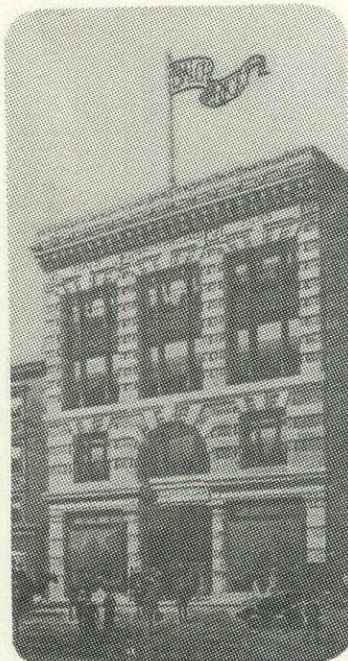
BALCH PRICE, BROOKLYN, N. Y.

The type of long, narrow floor space frequently found in store and loft buildings never fails to present merchandising problems, particularly when a wide variety of articles must be prominently displayed. The standard solution which places the small, inexpensive items nearest the door and bulkier merchandise toward the rear was worked out by department store owners long ago. In this instance, the exaggerated elongation of the building created an unusually acute problem of this type. The front part of the store amounts to little more than a passageway. To counteract the tunnel-like perspective from the main entrance the architect employed a number of contrasting shapes and colors, occasionally placing a showcase or table well away from the wall. Wherever stock space along the sides could be dispensed with, niches were created. Furs, the most expensive and slowest selling article, were given all the privacy possible. A series of free standing display units in the center of the main sales room at the rear screens the fur department and guides the customer unconsciously to the right through the principal circulation channel.

The fixtures and most of the upholstery fabrics were designed by the architect. Pickled oak, gray and off-white, make up a basic color scheme used throughout the store. The small, closely related departments are identified by brighter color accents; green in the jewelry department, rose in the millinery department, red for the sportswear and blouses. White plaster and marbled paper were lavishly used throughout as decorative touches. The showcases at the front of the store were designed with legs instead of carried to the floor to add to the feeling of space in the narrow section of the building. Cove lighting furnishes the general illumination; spotlights are used for individual displays. Space for future expansion is provided on the floors above.

FINISHES AND EQUIPMENT: FLOOR COVERINGS: Carpeting and linoleum, Alexander Carpet Co. WALL COVERINGS: Wallpaper—Laverne's "Marbalia"; Katzenbach & Warren; Jacobs Co. FURNISHINGS: Chairs—Theodore Abrams. Showcases and tables Stanger Bros. Fabrics—Creative Looms, Schumacher Co. WOODWORK: Trim—oak. Doors—pickled oak.

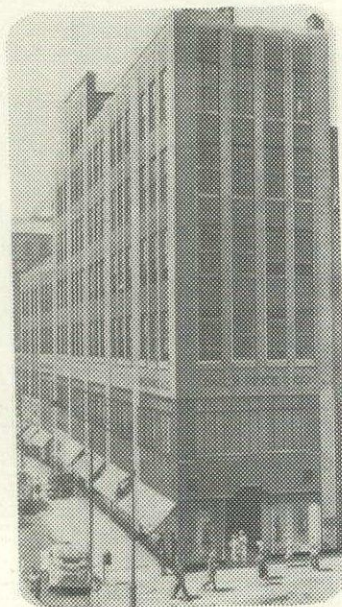
GENERAL CONTRACTOR: STANGER BROS.



1904



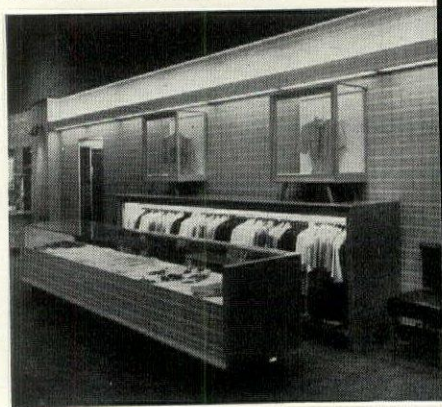
1916



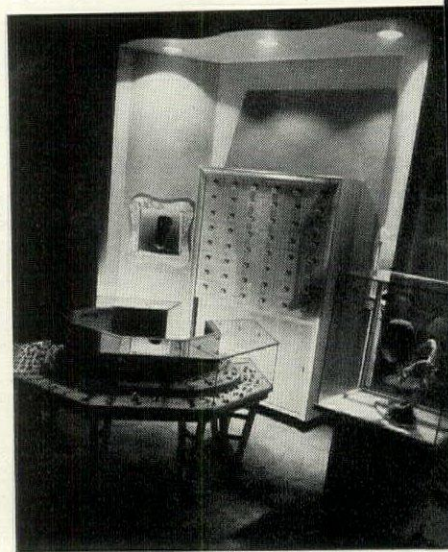
1941

Brooklyn Eagle

PAPERED WALLS AND SHOWCASES

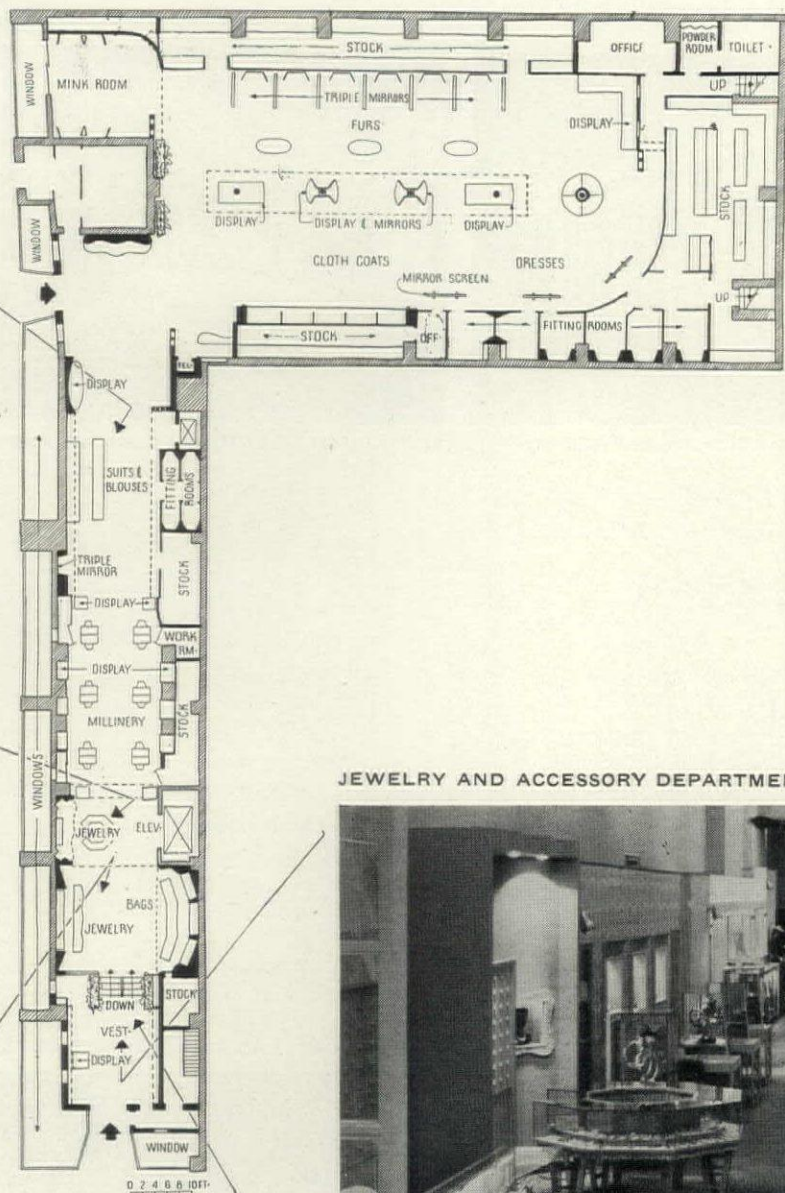


OCTAGONAL CASE EXHIBITS EARRINGS



DRAWER BANK FOR JEWELRY STOCK





JEWELRY AND ACCESSORY DEPARTMENTS ARE GROUPED IN AN INFORMAL SETTING



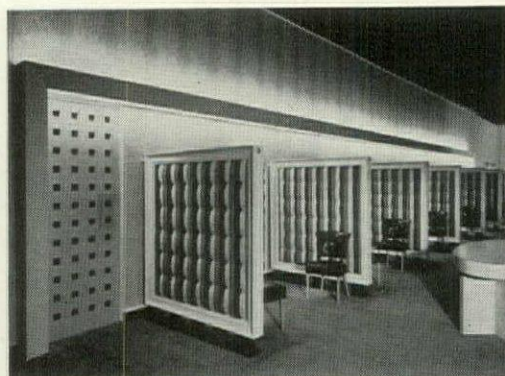
Photos: Gottscho-Schleisner

STAIRS LEAD DOWN TO SALES AREA





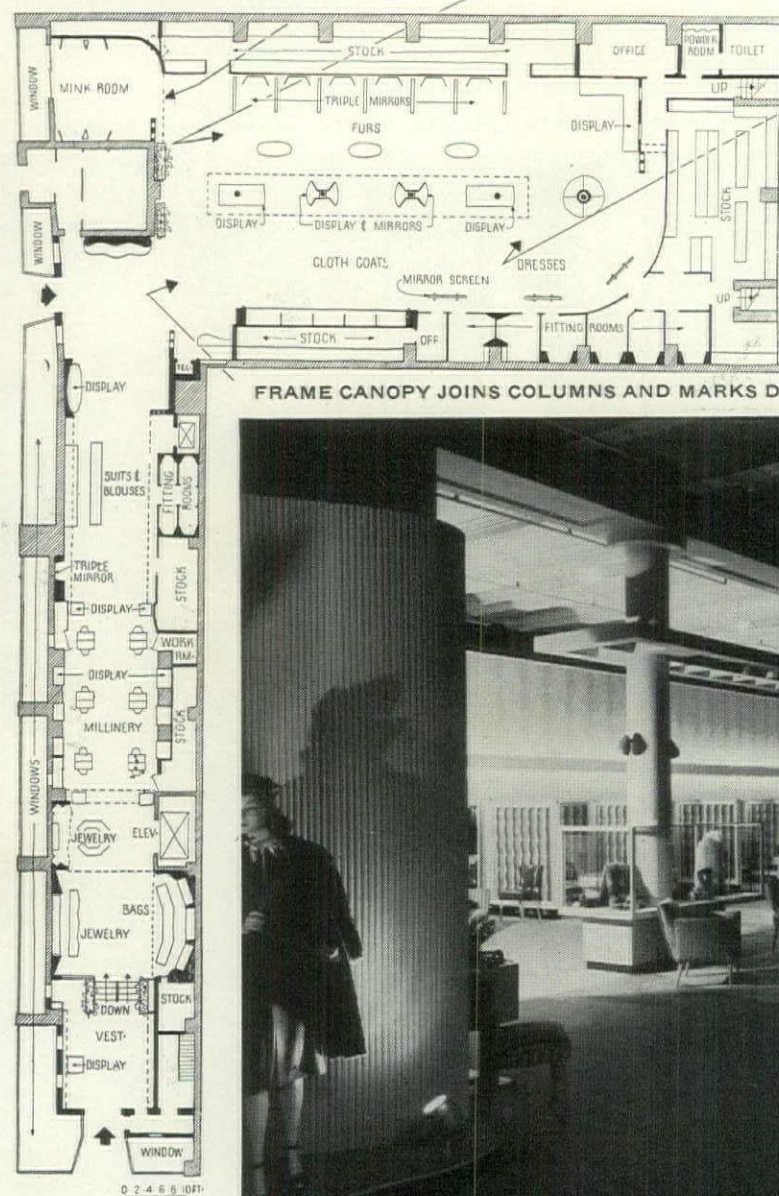
FALSE EGG-CRATE CEILING



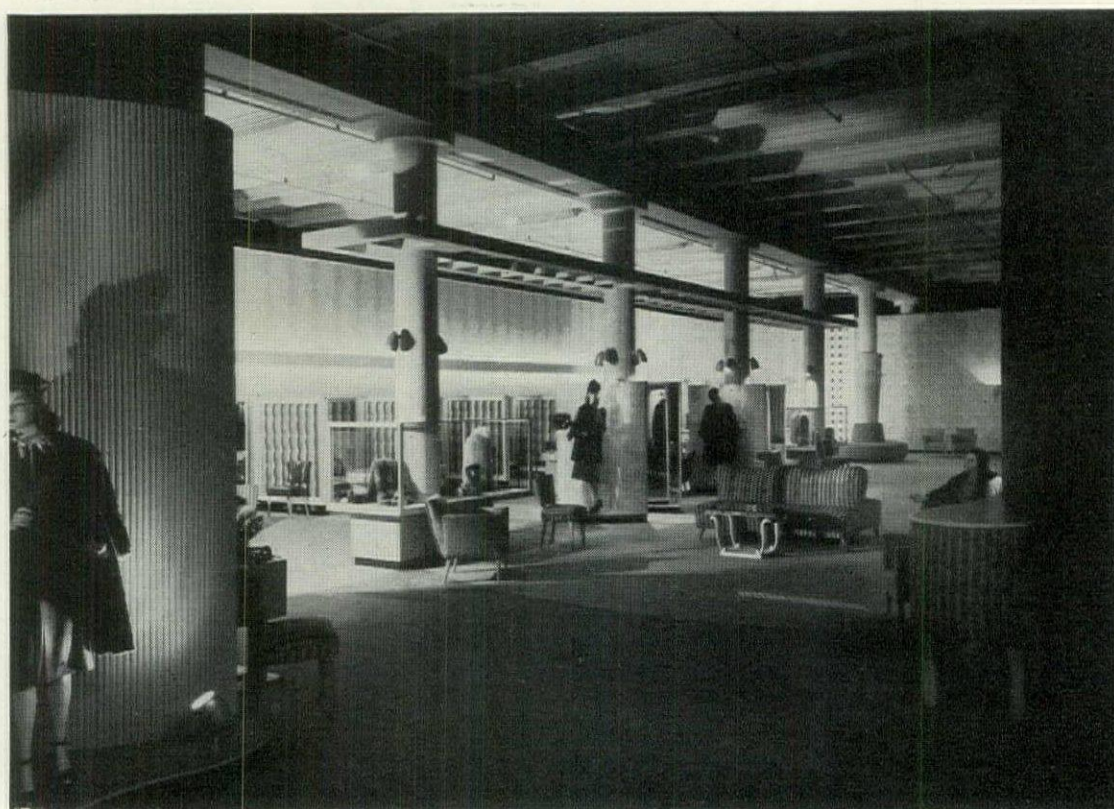
UPHOLSTERED PARTITIONS CREATE BOOTHS



SPOTLIGHTS ILLUMINATE SHOWCASES



FRAME CANOPY JOINS COLUMNS AND MARKS DIVISION BETWEEN COAT AND FUR DEPARTMENTS



CHAIN APPAREL SHOP.

Gruen and Krummeck plan a "Victory" store with non-critical materials.

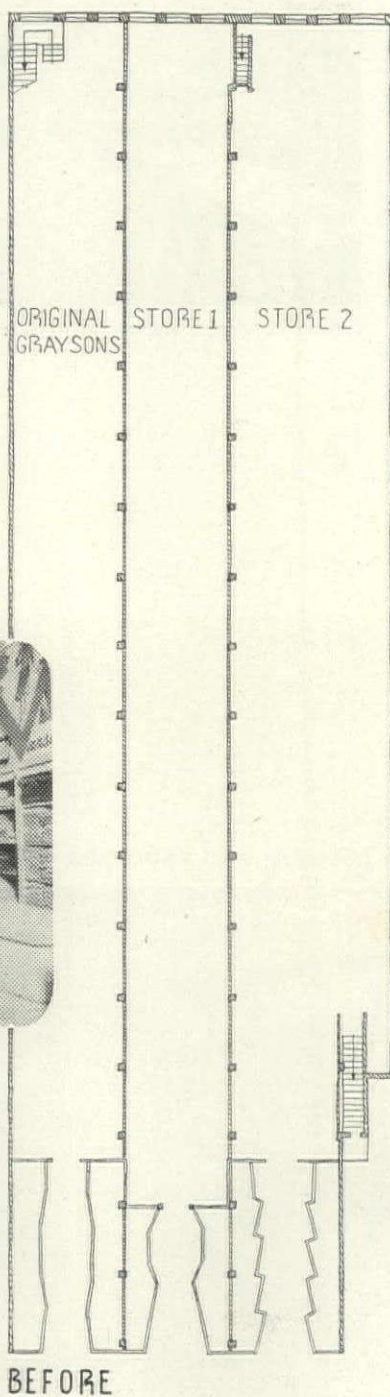
GRAYSON'S, SAN FRANCISCO, CALIF.

All designers agree that the war has taught them much about their work. Most emphatic are Gruen and Krummeck, who used unconventional methods and materials in redesigning a group of three stores to suit the expanding war-time business of a single firm of women's clothiers. The result is probably as lively and original a design as this type of remodeling has produced in some time.

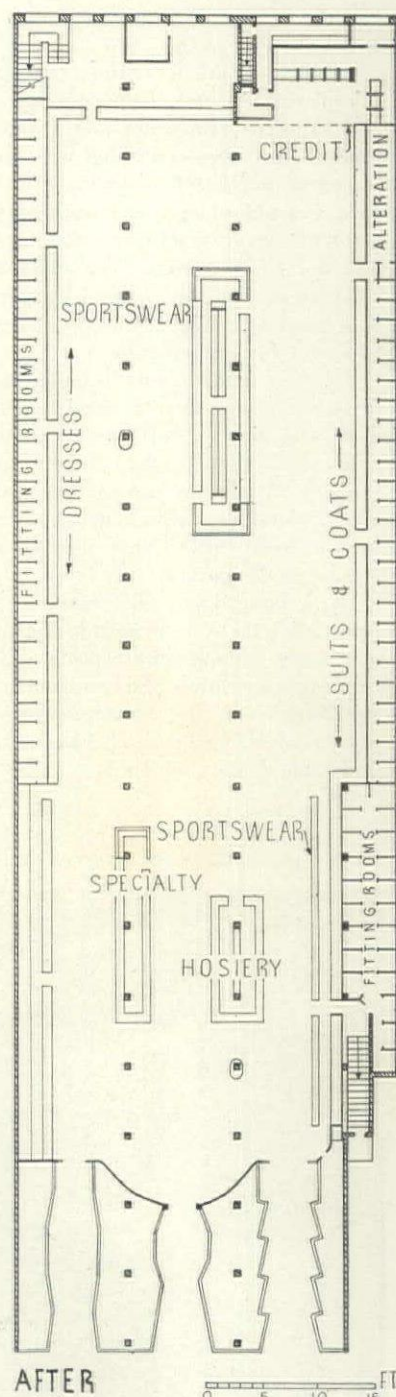
The firm originally occupied only one-third of the present site. Expanding to include space formerly occupied by jewelry and cigar stores, the problem of a unified front was the first to be tackled. Under normal conditions the three fronts would have been remade to form a single entrance. This was found to be impossible in wartime. Instead, a wooden frame was constructed 60 ft. wide and 25 ft. high and covered with half-round rods, forming a background for wooden cut-out lettering, which stands out in gold leaf against the flesh-tinted screen. Accomplished without structural alterations, the sign provides good advertising as well as a general face-lifting of the exterior. The three entrances remain, somewhat modified by the addition of curved wooden screens, which close off the arcades from the interior.



BEFORE VIEW OF ORIGINAL INTERIOR



BEFORE



AFTER

0 5 10 15 FT.

Chief problem of interior remodeling was the ceiling treatment. Each of the three original stores had three ceiling heights, making nine different levels in the new one. Restrictions put replastering out of the picture, and an existing sprinkler system prevented solid draping, which the designers had applied to other stores. The ingenious solution consisted of stretching crosswise 4 in. strips of flameproofed fabric, allowing the sprinklers to function through the square openings. By painting the area above this network dark and concentrating light downward, the designers succeeded in creating the effect of a uniform ceiling throughout the 200 ft. by 70 ft. interior.

Another problem encountered and solved, was that two of the columns carried exposed main water and sprinkler pipes. They were concealed with wood screening purchased ready-made by the yard and placed in free shapes around columns converted into signposts for the direction of customers. The remaining columns were covered with mirrors from floor to ceiling. Walls were draped with two-color fireproofed fabrics.

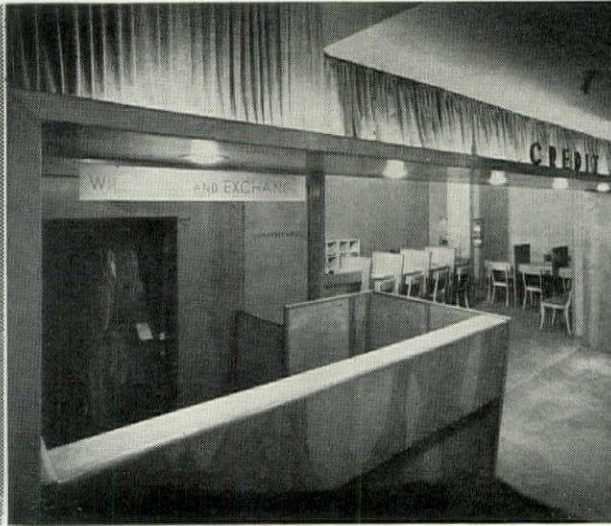
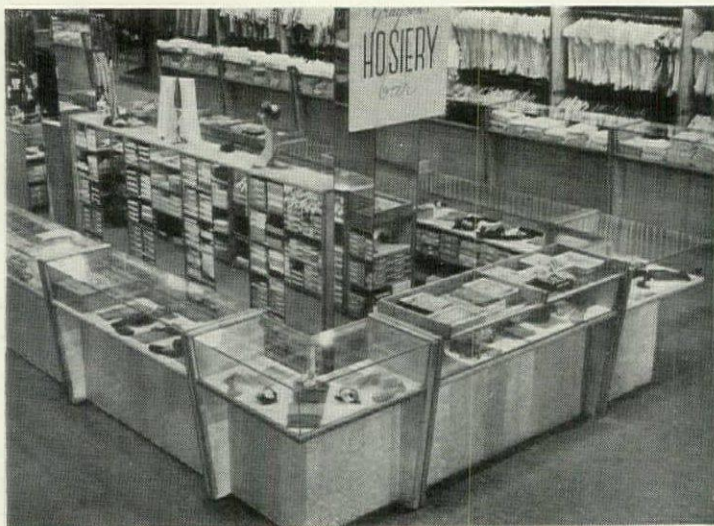
All sales fixtures were designed so as to be easily moved and fitted together. The wall bins are of standard length and can be used for hanging space or shelving. Umbrella and ashtray stands which would normally be made of metal are of wood, with glass fittings purchased at the corner cigar store.

By erecting dust-proof partitions and remodeling the store in sections business continued without interruption during the entire operation. Rearrangement of the interior can be accomplished simply by adjusting the size of the islands and table display counters.



THREE STORES WERE THROWN TOGETHER TO FORM A SPACIOUS, OPEN INTER

SALES ISLANDS AROUND THE MIRRORED COLUMNS AND FABRIC-DRAPED CALL AND CREDIT OFFICES ARE WELL DESIGN

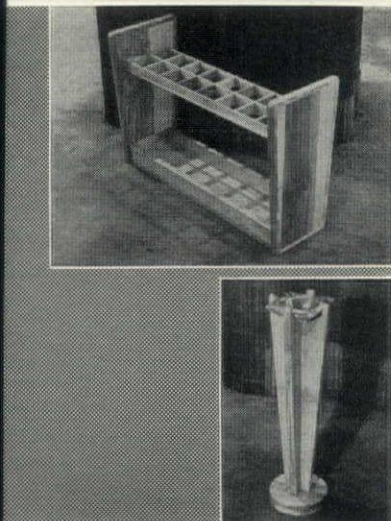


orful new decor, a practical example of applied remodeling under shortage conditions.



WARTIME NOTE IS STRUCK BY MAMMOTH NAMEPLATE ON UNDULATING WOODEN SCREEN. LETTERING IS GOLD AND BLUE

WOOD FIXTURES REPLACE METAL



NEW SETS OF GLASS DOORS WERE PURCHASED BEFORE PEARL HARBOR

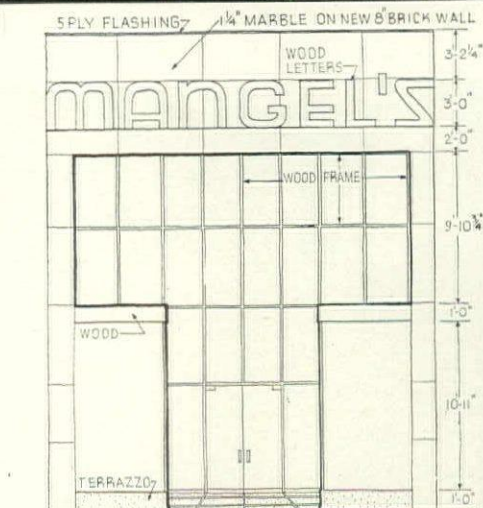


MANGEL'S, MONTGOMERY, ALA.

Architect Lapidus confesses that all he knew of modern architecture when he designed the original Mangel's in 1928 was learned from the then-famous Paris Exposition of Decorative Arts. The job was modern for its time, but he admits he was glad of the opportunity to remodel the front and interior in accordance with present-day merchandising ideas.

Major innovation is the raised front, which was obtained by removing the second floor to a depth of 56 ft. creating an upper level display space backed by a plaster cove which gives the illusion of great depth. The entrance wall is a single large window of hardwood frames and glass, giving almost 100 per cent vision of the inside of the store. Large, floodlighted showcases extend the window-like effect to the sidewalk and form a wide arcade for leisurely shoppers.

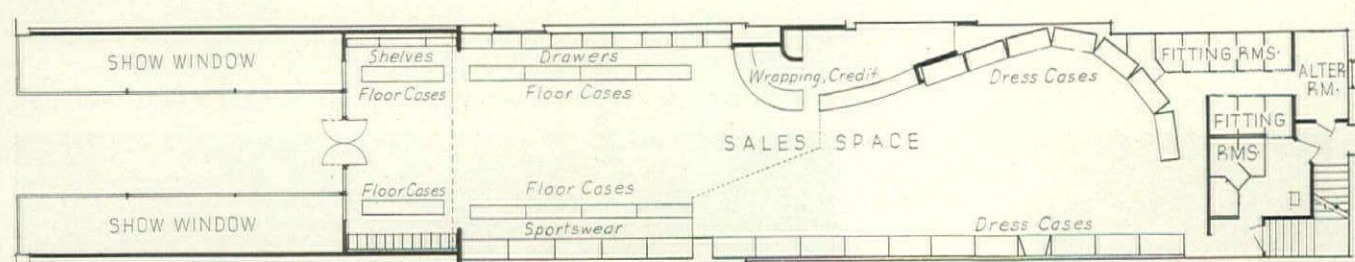
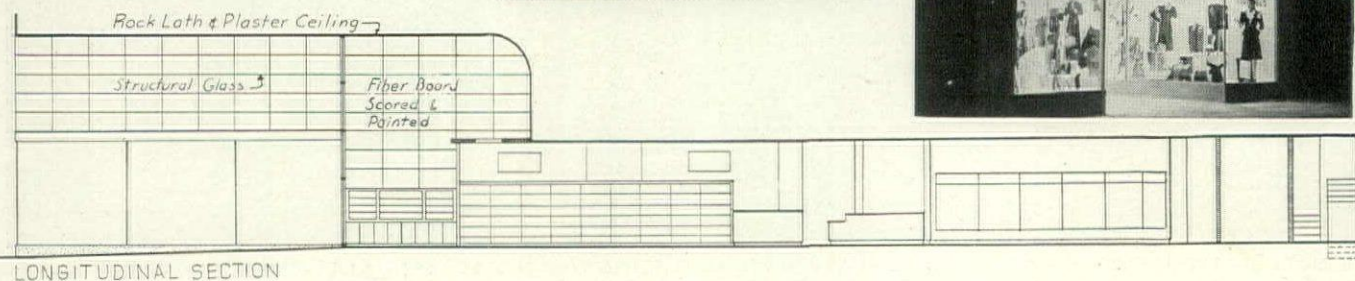
Inside, the plan was changed to give more space to sales by including a large proportion of the stock in wall display cabinets and hangers. The cabinets have architect-designed lift-up and slide-back doors of glass framed in maple, so that the goods can easily be identified. The dress-cases form a pleasant curve, behind which fitting cubicles and an alteration room are located.



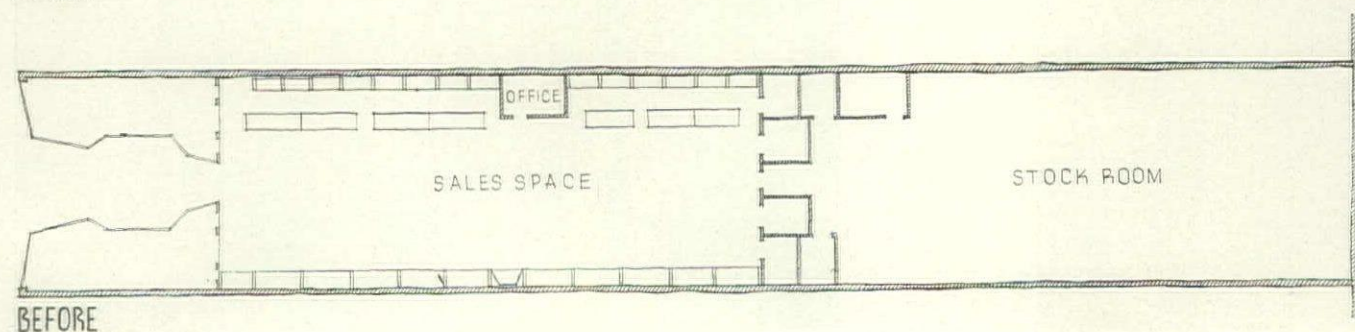
OLD STORE BY SAME ARCHITECT



REMODELED STORE HAS TALL FRONT

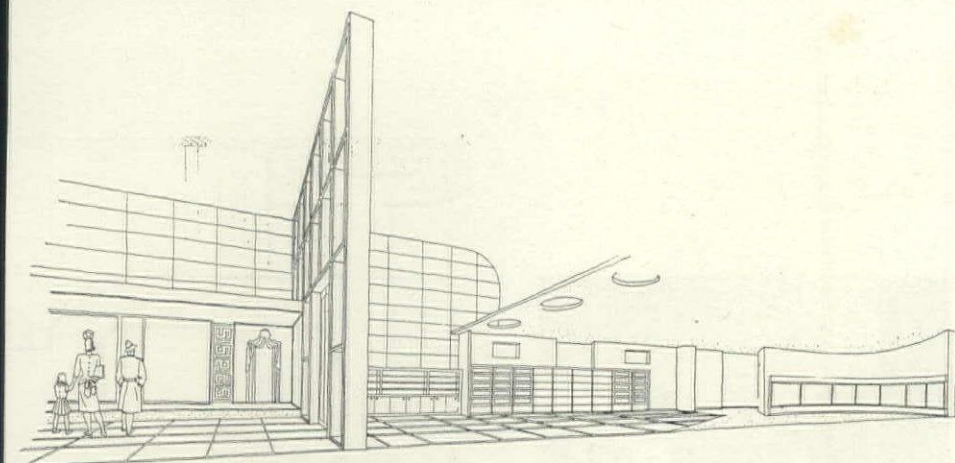


AFTER



BEFORE

proves that a higher front, open arcade, and second floor display space can really increase sales.



FINISHES AND EQUIPMENT: FLOOR COVERINGS: Linoleum—Armstrong Cork Co. Carpet—Mohawk Carpet Mills. FURNISHINGS: Oak cabinet work—Ross-Frankel, Inc. DOORS: Herculite, Pittsburgh Plate Glass Co. Hinges—Rixson. WALL COVERINGS: Wallpaper—Katzenbach & Warren. ELECTRICAL INSTALLATION: Fluorescent units and R-40 lamps—General Electric Mfg. Co. HEATING & AIR CONDITIONING: Carrier Corp.

GENERAL CONTRACTOR:
ROSS-FRANKEL, INC.

ALL BECOMES WINDOW AND THE ENTRANCE A SPACIOUS ARCADE IN THIS INTERESTING EXAMPLE OF THE OPEN FRONT



WOMEN'S CLOTHING STORE.

Indirect lighting, textured wall surfaces and an informal furnit

RANSCHOFF'S, SAN FRANCISCO, CALIF.

The generally acknowledged importance of controlled lighting in display areas is well illustrated in this store where the sales floor was deliberately made an interior room. Only the millinery department, where the accurate matching of colors is most important, receives natural light. However, most of the dressing rooms have windows. Bracket fixtures on the sales floor give subdued, indirect illumination. Cove lighting is used in the show cases to stress merchandise on display.

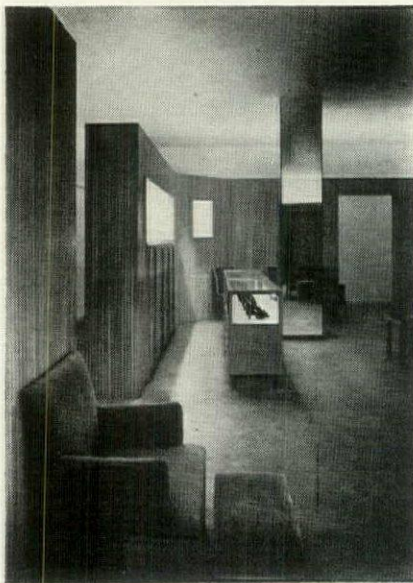
The plan ranges stockrooms, offices and dressing rooms around a central sales area. Before remodeling, the floor was used only for storage, and except for the structural columns and elevator bank, the architect had a clean space with which to work. The masking of the columns has been well handled. While there is nothing new about using mirrors for this purpose, backing the columns with a wall is a simple idea which does much to play down their prominence. Since the district required fire-proof construction, the walls were built of hollow tile to a height of 8 ft. with glass to the ceiling. The glass is set flush and painted to resemble plaster.

The choice of wall coverings is imaginative and appropriate. Because of the large scale of the space, texture is particularly desirable. In the shoe department it was achieved with stock 3 in. oak flooring first ripped into 1 in. widths and applied to the wall with 3/16 in. spacing. In the millinery department the walls are covered with reed window-shade material painted beige. Oak plywood, bleached and waxed is used in the main salesroom. The same wood is used for doors, trim and furniture. Its tone is matched by the paint, creating an unobtrusive background for the merchandise. Color accents are found in the upholstery, decorative plants and accessories.

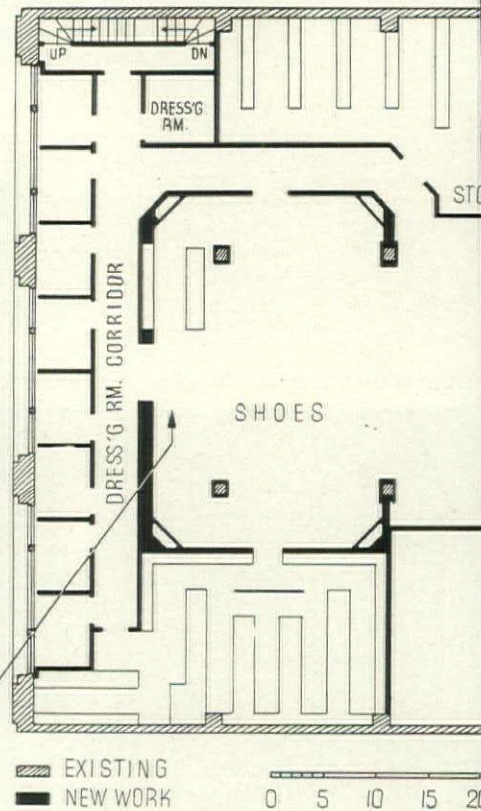
FINISHES AND EQUIPMENT:

FLOOR COVERINGS—Carpet. **WALL COVERINGS:** Oak plywood, reed screens and 3 in. oak flooring. **FURNISHINGS**—oak, bleached and waxed. **TRIM**—oak, **HARDWARE**—Sargent & Co.

GENERAL CONTRACTOR: JACKS & IRVINE.



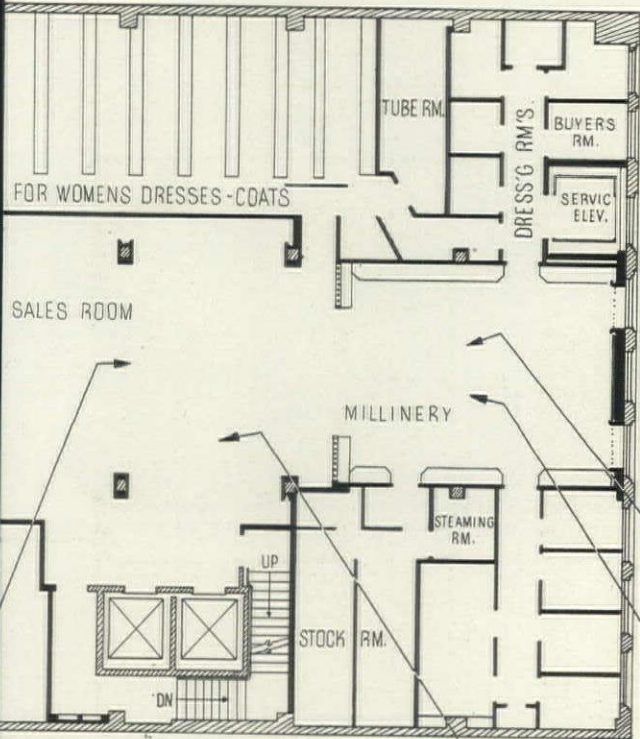
LIGHTING EMPHASIZES DISPLAYS



THE MILLINERY DEPARTMENT IS THE ONLY ONE WHICH RECEIVES DAYLIGHT



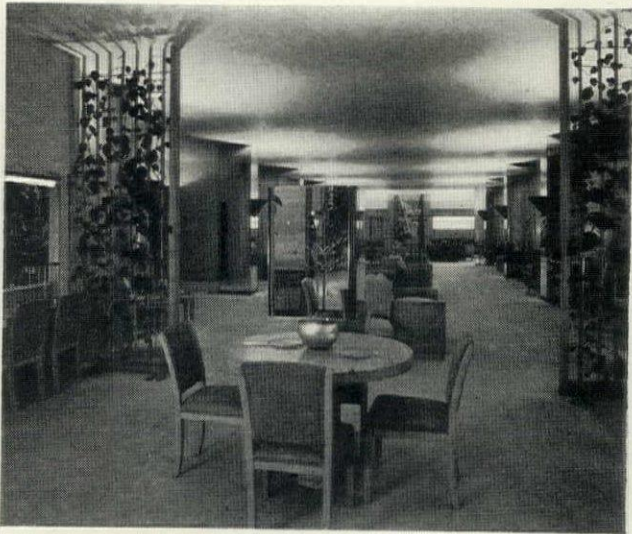
gement are the outstanding characteristics of this specialty shop interior designed by Gardner A. Dailey.



LIGHTING FIXTURES ARE SPECIALLY DESIGNED

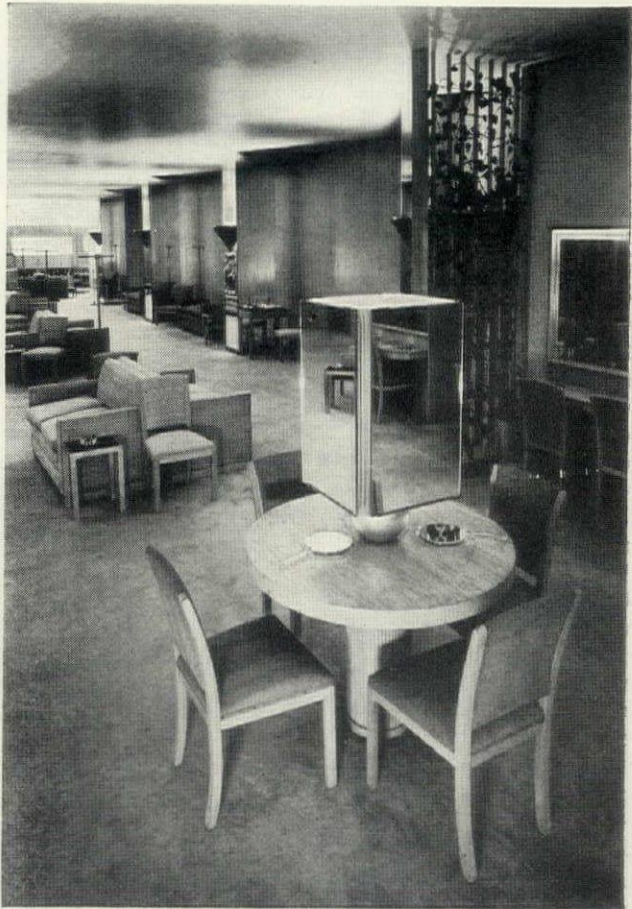


Photos: Roger Sturtevant



VINE-COVERED POLES SCREEN MILLINERY SALON

COMBINED MIRROR-LAMP IS FOR TRYING ON HATS



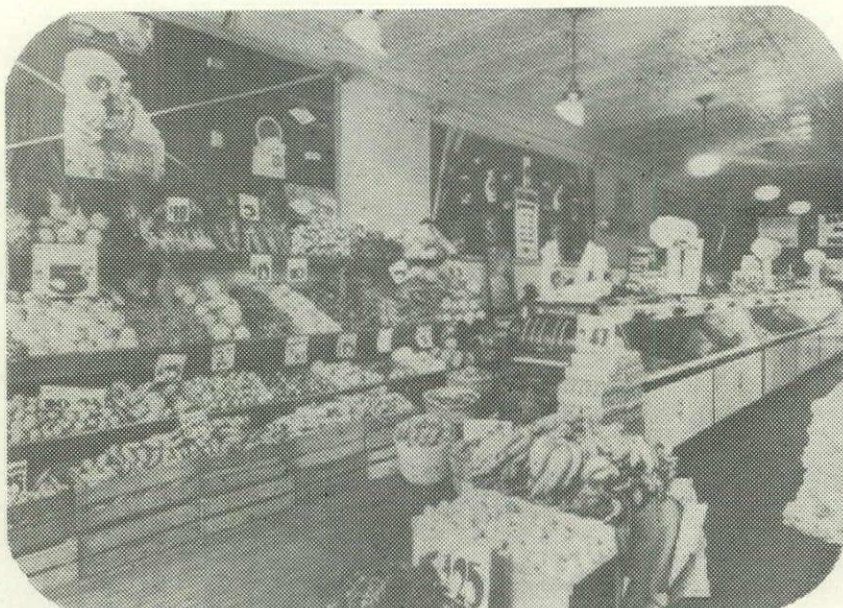
BETTENDORF'S MARKET, ST. LOUIS, MO.

Wartime problems of rationing and fuel shortages have limited the operation of supermarkets located away from heavily-populated districts. It is therefore doubly interesting to find that this firm not only remodeled its store in the most critical period of supermarket history but introduced a number of new design features and special types of service.

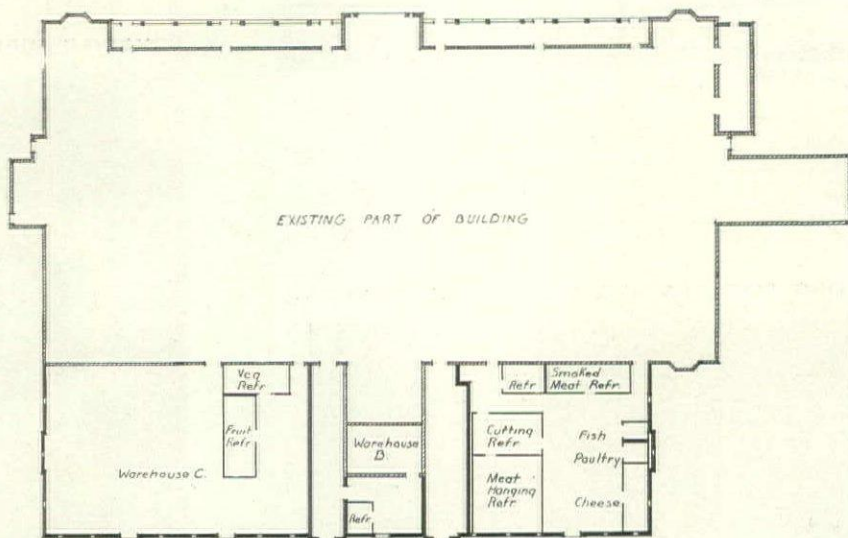
Occupying the largest single shopping tract in the St. Louis area, the building was set back 300 ft. from the roadway to allow for ample parking. The present owner added 8,000 sq. ft. to the existing 20,000 sq. ft. of floor space, in the form of warehouse and refrigeration facilities, a curb-service fountain and self-service liquor department. Little was done to the original structure, except to enclose part of the colonnade and install a sound absorbing ceiling and a terrazzo floor. The Colonial front, oddly unrepresentative of the throbbing, seven-day-a-week activity which goes on behind it, remains unchanged.

The architect and owner gave much thought to labor-saving installations to alleviate personnel shortages and increase customer convenience. Storage coolers were located so that replacement stock could be obtained with the minimum of effort. In the self-service produce department 85 per cent of the stock is always on display on all-metal elbow-high counters with an 8 in. stainless steel casing around the upper edge to protect customers' clothing from snags and tears. Each variety of vegetable and fruit is displayed in a wire ice-tray. Perishable varieties rest on beds of "ribbon" ice, provided by a machine behind the counter. The dairy section has a blanket cooling system which covers the open bins with a layer of cold air.

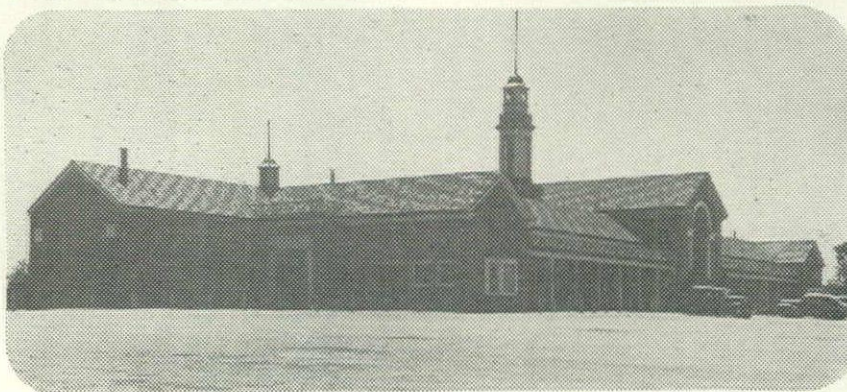
Combining these technical innovations with a series of new sales methods, the firm has successfully weathered the war years. By servicing the maidless, middle-income district with a hot foods delivery system it has extended its operations into the surrounding homes. An insulated motor-cycle side-car, electrically heated, protects the temperature of the food on its journey from the kitchens. Busy housewives can also select hot foods from the twelve thermostatically-controlled food pans in the main building or an entire dinner can be eaten at the stainless-steel soda fountain to the left of the main doors.



HAPHAZARD DISPLAY METHOD USED BY THE FIRM BEFORE REMODELING



BUILT AS A GROCERY STORE, THE MARKET CHANGED HANDS IN 1941



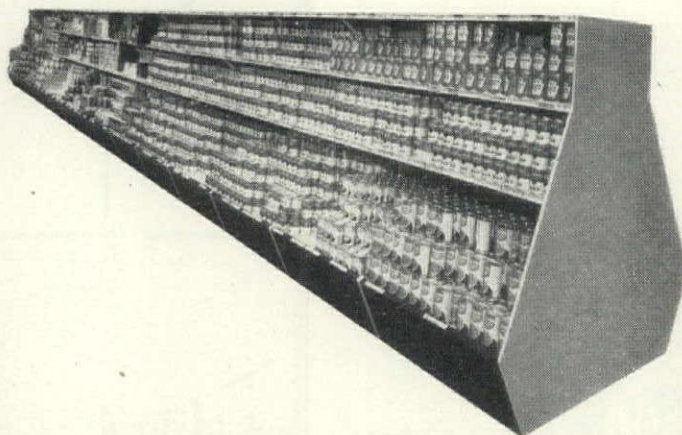
ice, and regulation marketing facilities. A drive-in store in St. Louis, Mo., designed by Carl F. Schloemann.



Photos: Super Market Merchandising

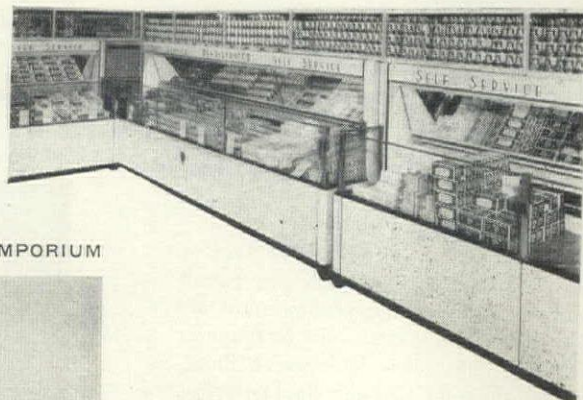


SELF-SERVICE PRODUCE COUNTERS HAVE BAG SHELVES, REFRIGERATED TRAYS. MEAT COUNTERS ARE IN 10 AND 20 FT. UNITS



SHELVES HAVE RECESSED BASE. DAIRY GOODS ARE BLANKET-COOLED

CUSTOMERS ARE CHECKED OUT HERE



THOUSANDS OF ACRES OF PARKING SPACE SURROUND THE RECONDITIONED FOOD EMPORIUM



WHOLESALE SHOWROOM

Morris Lapidus creates a streamlined salesroom for a chemical company.

Photos: Gottscho-Schleisner

EIMER & AMEND, NEW YORK, N. Y.

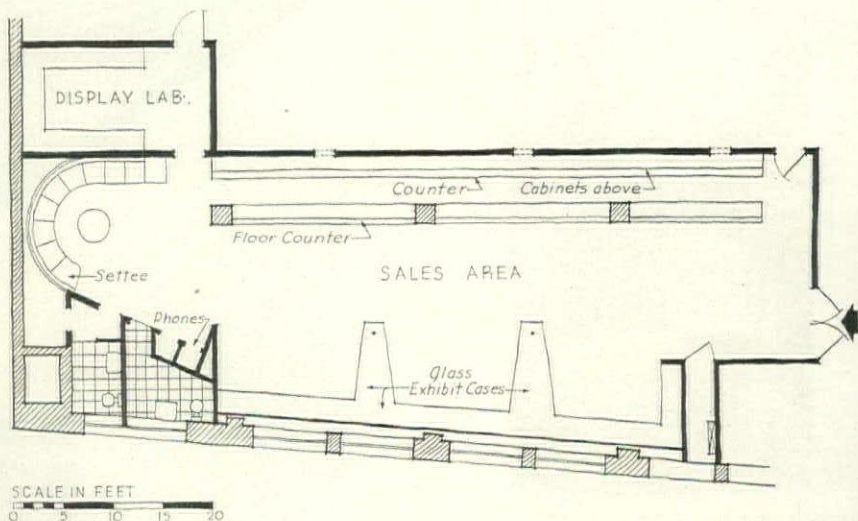
In strange contrast to the old warehouse in which it is situated, this cleanly-designed salesroom is expressive of the chemical products it is designed to sell. Unadorned to the point of severity, it is reminiscent of the laboratories, hospitals and photographic studios from which its customers come.

Originally the store was merely an open space sketchily separated from racks for stocking and warehousing bulk material. In the new plan, merchandise is completely segregated from the salesroom. The necessary sales counter becomes a display for samples of chemical products and the opposite wall is devoted to cases exhibiting scientific equipment.

The most significant factor in the design as a whole is lighting, used to create



AUSTERE DESIGN IS EXCELLENT SETTING FOR PHARMACEUTICAL PRODUCTS



GLASS AND CHROMIUM DISPLAY CASES AT SIDE HOUSE SCIENTIFIC EQUIPMENT

block patterns in an otherwise bare interior. Both the recessed ceiling panels and the continuous glazed window are based on repetition of rectangular shapes. This theme is repeated inconspicuously in the linoleum floor covering.

The design formula of this showroom — straight unbroken lines — has much in common with the International Style popular a few years ago. Intrinsically appropriate to a chemical company, its component elements have been handled with a sureness that comes only from experience.

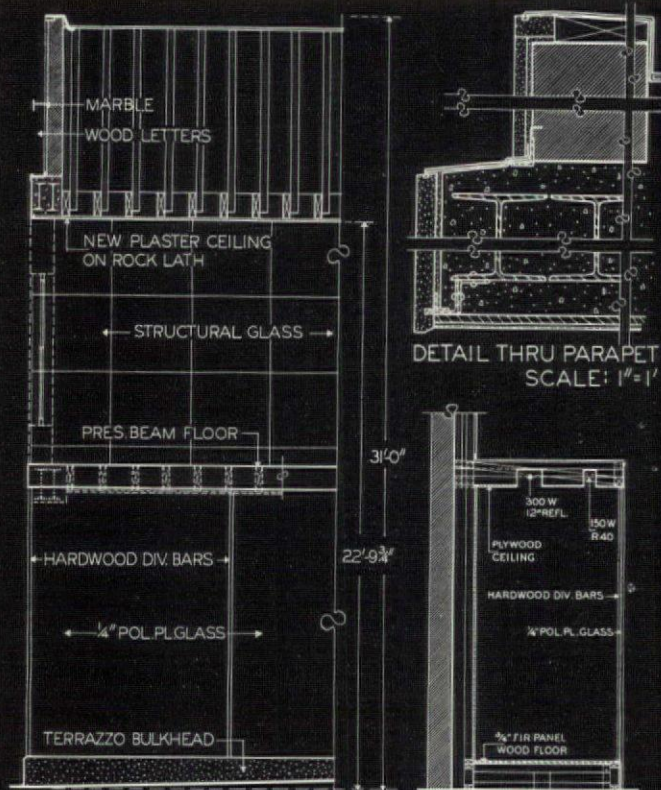


ARCADE STORE FRONT

MORRIS LAPIDUS, ARCHITECT

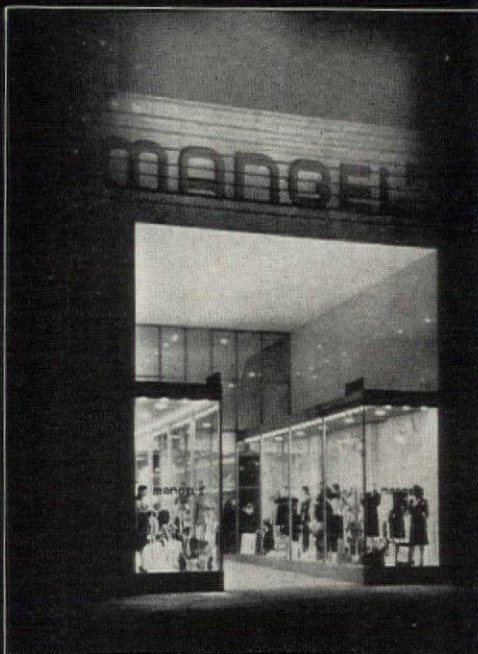
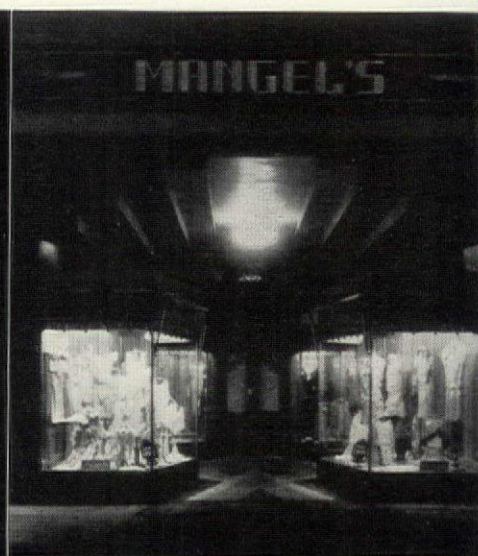
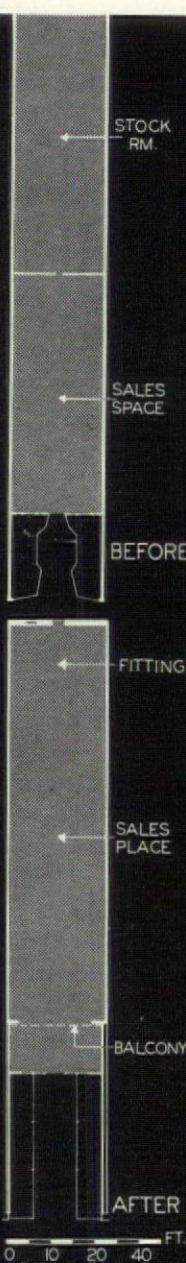
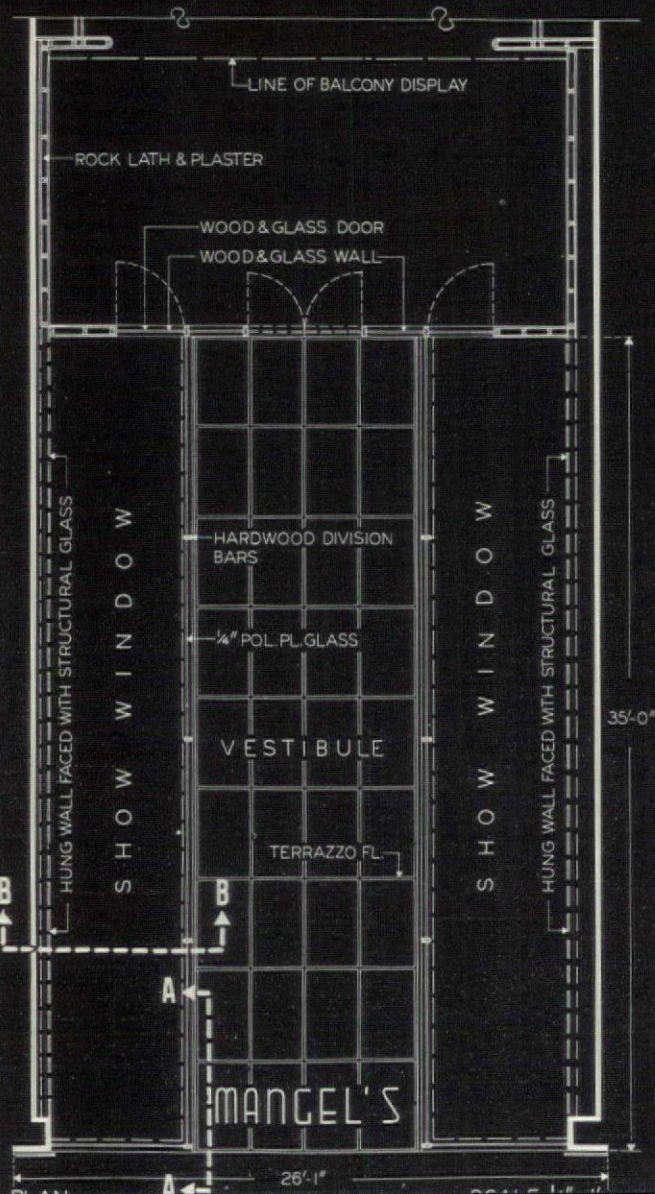
DESIGN DATA 20.

THE ARCHITECTURAL FORUM



SECTION A-A

SECTION B-B



REMODELE



MAIN STREET, NILES, MICHIGAN

Ketchum, Gina & Sharp, Architects, convert a block of outdated storefronts into a modern shopping center without sacrificing individuality.

This postwar project envisages the simultaneous remodeling of an entire block front under the direction of a single architectural firm as part of a still larger program for the improvement of shopping centers throughout the country. The design is intended as a prototype for modernization of the town's entire business section and as an example for other interested communities. Sponsored by the Kawneer Co., manufacturers of storefront equipment, the plan calls for the cooperation of merchants, citizens and the municipal government. It is hoped to coordinate this project with civic improvements which include a by-pass highway around the center of the town.

To inaugurate the plan, Kawneer had its consulting architects prepare a study for the postwar remodeling of the storefronts along one side of a single block of Nile's Main Street. The resulting design, presented on the following pages, was recently submitted to the twelve merchants concerned with the assurance of the active cooperation and assistance of the Kawneer organization in carrying it out. It was emphasized that the proposed improvement was simply a unit in the over-all redevelopment of the Niles shopping center and that eventual agreement of all the merchants and building owners concerned will be necessary before the more fundamental problems of traffic, parking and service access to the stores can be solved; also that the preliminary design would be modified and further developed on the basis of discussion between the architect and the individual merchants.

Convinced that postwar modernization must proceed on a community rather than an individual basis, the sponsors plan to develop a service which will make available designs for remodeled shopping centers, complete with replanned stores, to groups of storekeepers all over the country.

Niles, the home of the Kawneer Company, was selected for the pilot study not because of any spectacular deficiencies, but because it is a typical American community. Regional and city analysis proved that it suffers from most of the symptoms of uncontrolled development: congested traffic and parking, inadequate service facilities, obsolete buildings and stores. It was also discovered that while the majority of shoppers purchase their staples in Niles and make use of its service establishments (dry cleaners, laundries, barber shops, etc.), the neighboring cities of South Bend and Chicago draw part of the trade for clothing, gifts and furniture. In other words, consumers find Niles' shopping facilities inadequate for the purchase of other than staple merchandise.

The frontage selected for the pilot study is typical of Main Streets all over the country for both size and type of store. Because of the experimental nature of the project, the architects' scheme is by no means complete: modernization of the storefronts is based only on exterior appearance. Interior requirements will be worked out later. Continuity of design and harmonious use of materials are major elements in the project. While it is planned to paint all the buildings a uniform color above the first floor, the two instances where

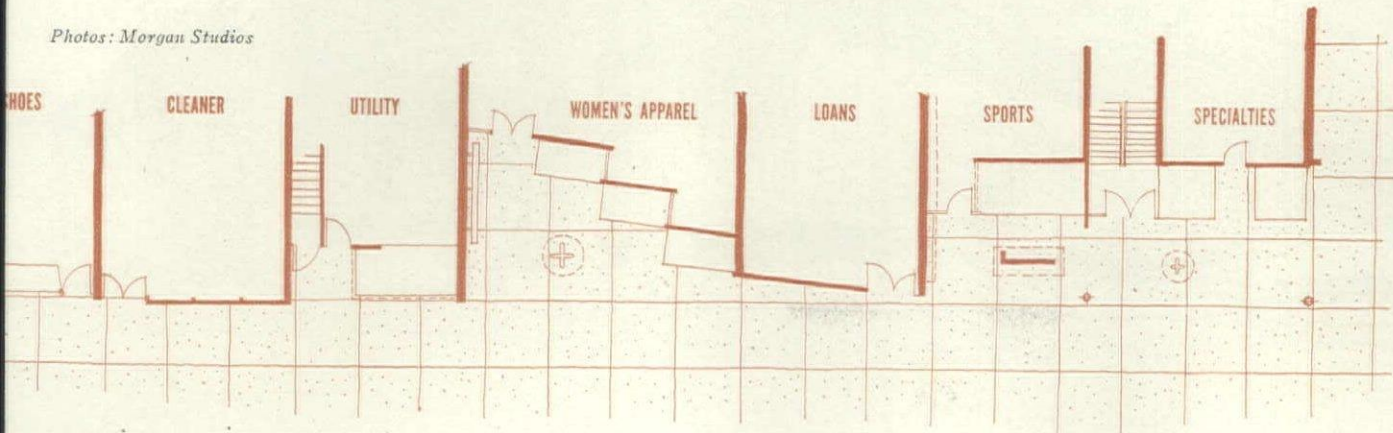


DRUG AND CANDY STORES TODAY

an entirely new facade has been applied to the full height of the building suggests that a more extensive remodeling of the block might be practicable at a later date.

The Niles project goes a long way toward reconciling the storekeeper's desire for individuality with the need for unified design. Striking character has been given the separate stores, but through ingenious handling of the group plan adjacent facades play an important part in complementing and emphasizing each other. A number of unusual design features, all created from stock elements, are used to produce this inter-relationship. The elimination of show windows for stores where no merchandise is sold is one example; the dual treatment of two stores featuring a large, common entrance is another. As a result, the block front appears much less cut up, and because disorganized competitive signs are absent, each display receives additional emphasis. In most cases the new plan greatly increases the prominence of the display area despite small frontages.

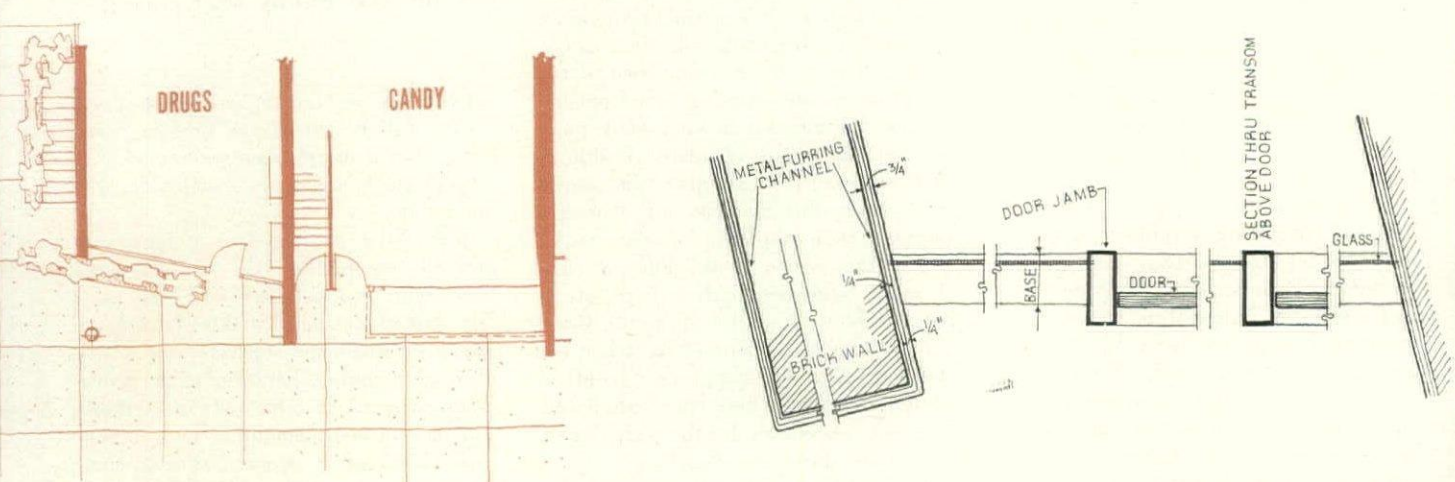
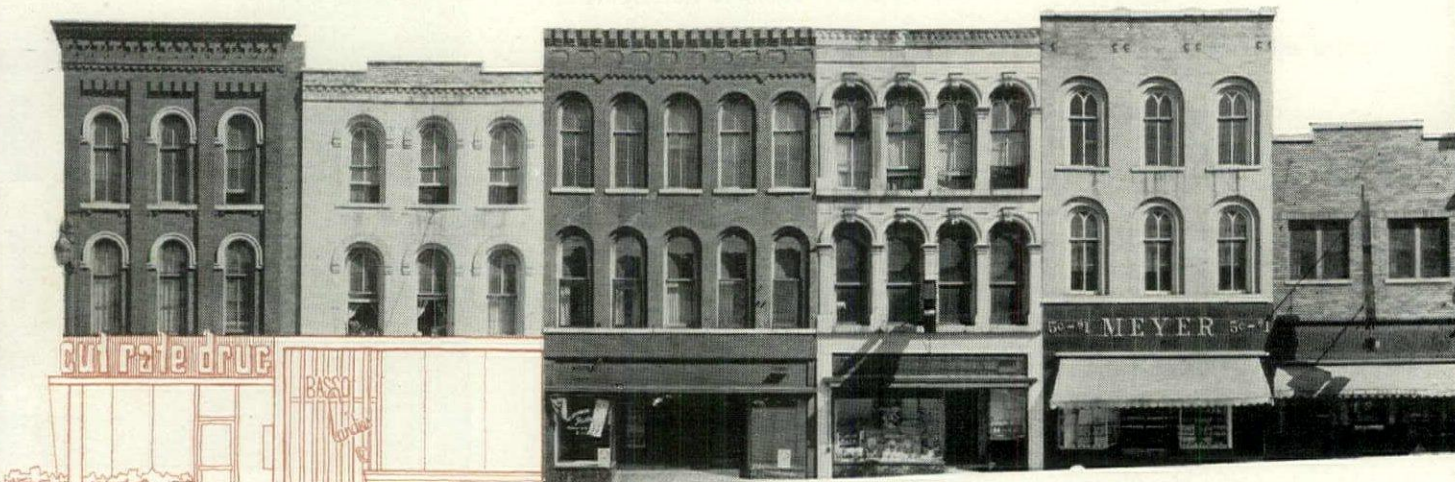
Photos: Morgan Studios



DRUGS, CANDY.

Two smart designs lead off the block remodeling project. Their open front treatment and

KETCHUM, GINA & SHARP, ARCHITECTS

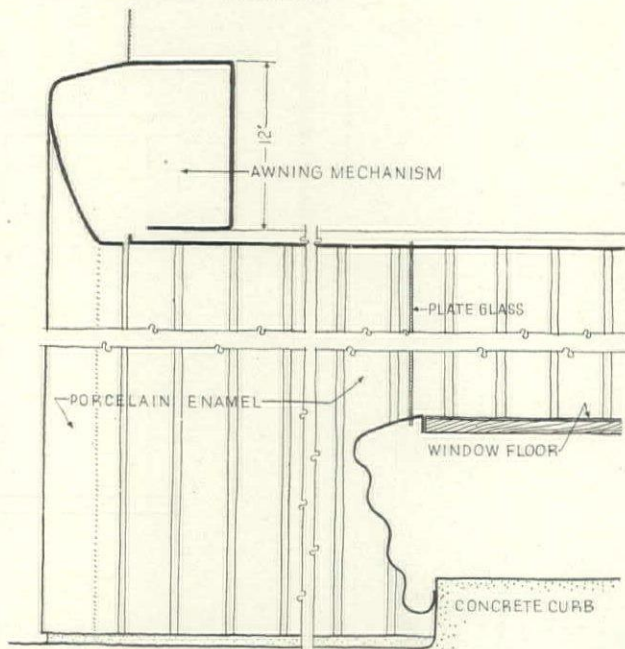


Perspectives: Joseph N. Boaz and Dale C. Byrd

lity signs point up the outmoded appearance of existing shops.



PLAN SECTION THRU MAIN WINDOW



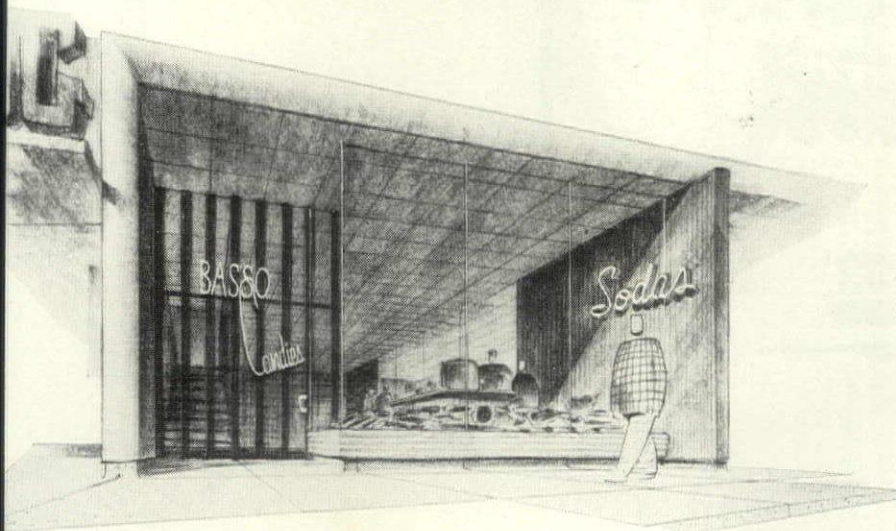
SECTION THRU WINDOW

DRUGS

The corner drugstore, like its counterpart in many small American towns, does not take advantage of its strategic position. By merely moving entrance doors to the right, the location can be given a continuous open front on Main Street. The entire sales room will become a display and the sidewall, which carries showcases at right angles to the sidewalk, will be visible from both intersecting streets. Sign lettering, carried around the end of the store, will also be clearly seen from two directions. To identify a basement barber and beauty shop without detracting attention from street level displays, separate sign walls and improved stairs will be provided.

CANDY

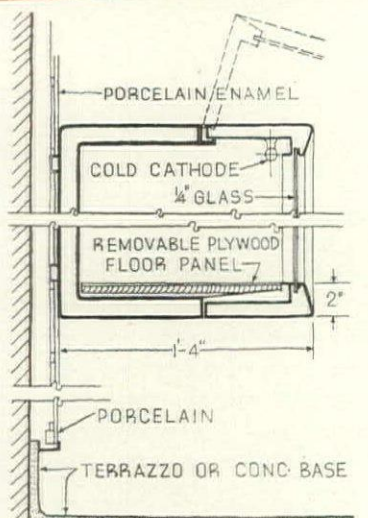
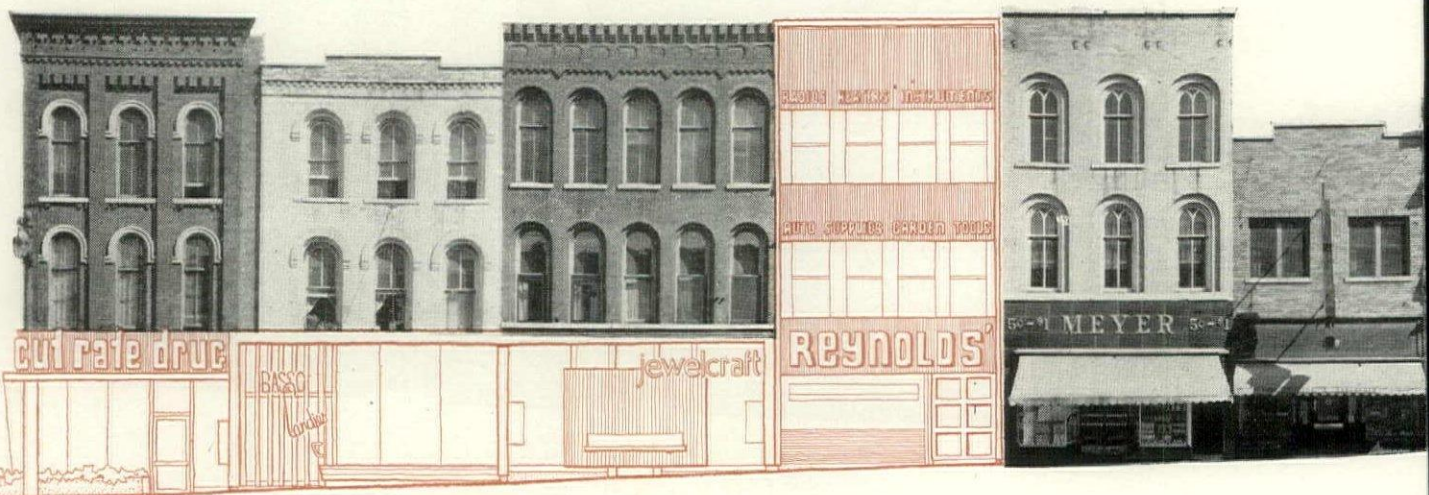
A commonplace store front, broken up by separate entrance doors for upper and lower levels is replanned into a light, open-faced shop expressive of the candy and soda fountain it contains. Combining the two entrance doors in a panel is the most important step in the remodeling. By concentrating traffic at the left, this device will save valuable street frontage and permit a spacious store-high show window. Translucent ceiling panels will provide general illumination. A lateral arm awning box will be used at ceiling level to enclose both this store and the adjoining jewelry store. Without loss of identity, the continuous box pulls the two shops together in a unified design. A separating partition provides excellent eye-level sign space visible to pedestrians approaching from either direction.



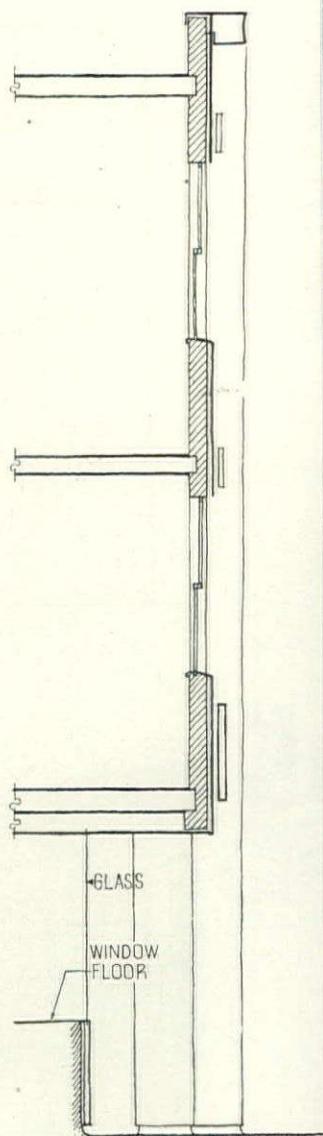
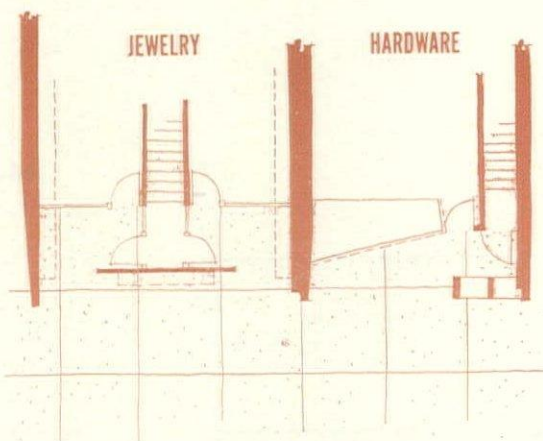
JEWELRY, HARDWARE.

Although every new store front is indicative of the business it represents, e

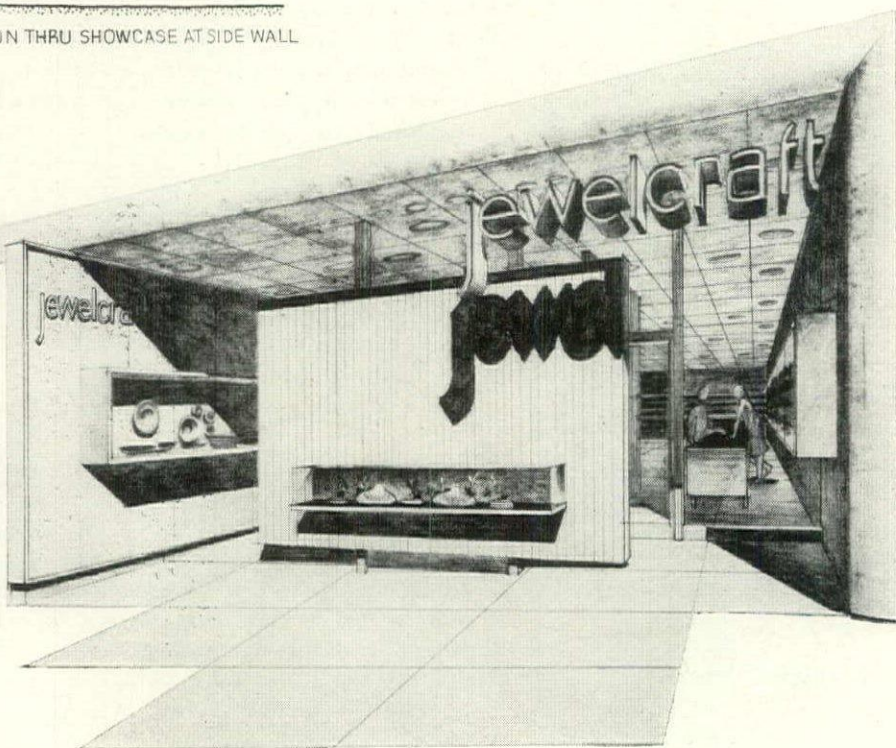
KETCHUM, GINA & SHARP, ARCHITECTS



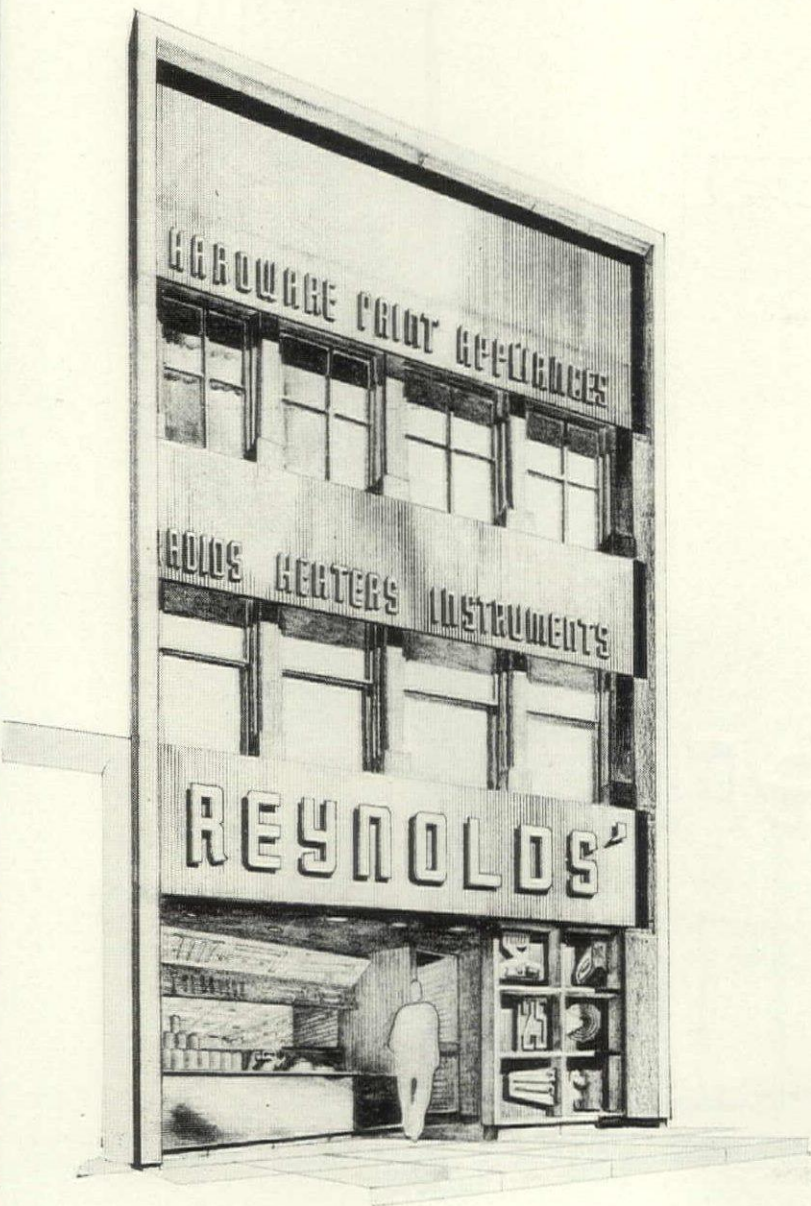
SECTION THRU SHOWCASE AT SIDE WALL



SCHEMATIC SECTION THRU SHOW WINDOW



designed to harmonize instead of compete with adjoining stores.



JEWELRY

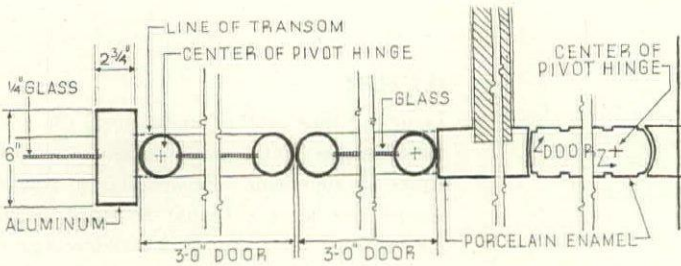
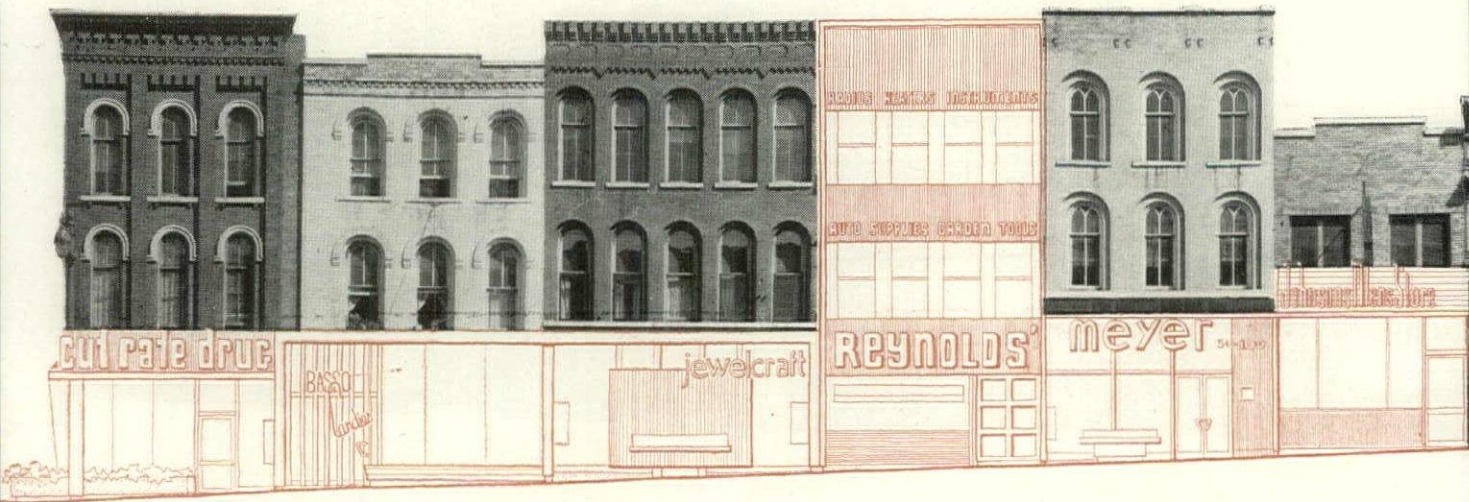
As in the case of the candy store, the major disadvantage of the next building is its entrance arrangement. Because three doorways occupy the most valuable frontage, leaving only a small space for show windows, its two shops are hard to rent. As a simple solution to this problem, a metal-faced partition with a horizontal case for jewelry display will be used to screen the doors. Access will be around either side of the display wall, while the original vestibule and entrance to upper floors remains unchanged. The ground floor, however, will be replanned as a single store with the twin selling spaces united behind the central staircase into a large sales area.

HARDWARE

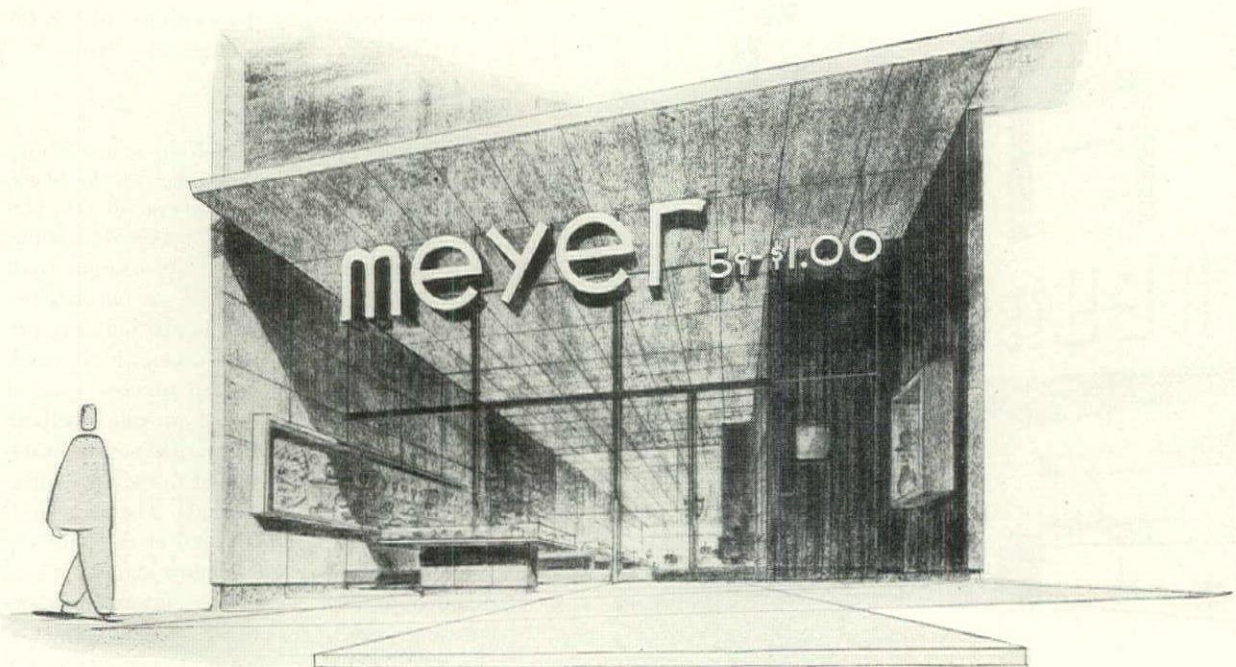
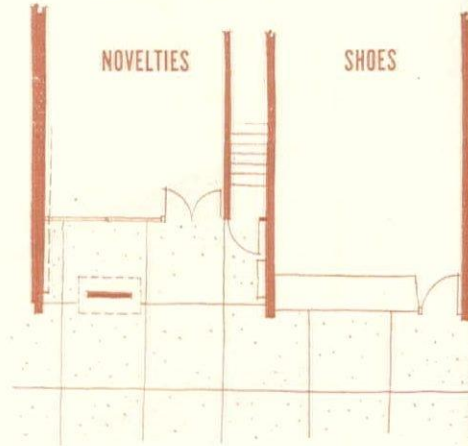
Because its original store front is more functionally planned than any other on the block, the hardware store will require no fundamental changes. Certain poorly executed features will be restudied and the entire upper front included in remodeling. A metal molding around the sides and top of the building ties together upper and lower doors. Free standing metal spandrels between windows conceal objectionable elements and provide excellent sign space—suggesting an inexpensive solution which could be applied to the upper part of other buildings in the block. The main show window—with a vision panel at the back—is recessed to encourage window shopping, and slanted to lead pedestrians inward towards the entrance. To provide a suitable background for the display of larger items, the right-hand showcase is divided in an eggcrate arrangement.

NOVELTIES, SHOES. Cluttered stores are replaced by simple designs which make liberal use of the open

KETCHUM, GINA & SHARP, ARCHITECTS



PLAN OF STORE FRONT



nt. Interiors become displays visible from the street.



NOVELTIES

Although the existing ten cent store front is more up-to-date than its neighbors, its door and show window arrangement is too complex for good display. In the new design, the whole store is converted into an open front display lobby—a theme which, in varied form, runs through the entire block. With entrance doors and facade combined in one simple glazed unit, the impact of interior sales counters will be heightened. Sidewall showcases—another feature repeated in nearly every store—will be visible to shoppers approaching from both directions. Although the entrance to the second floor stairs will not be moved, remodeling will integrate it with the new display walls. The ceiling, which contains translucent lighting panels, will project to form a canopy over the recessed lobby.

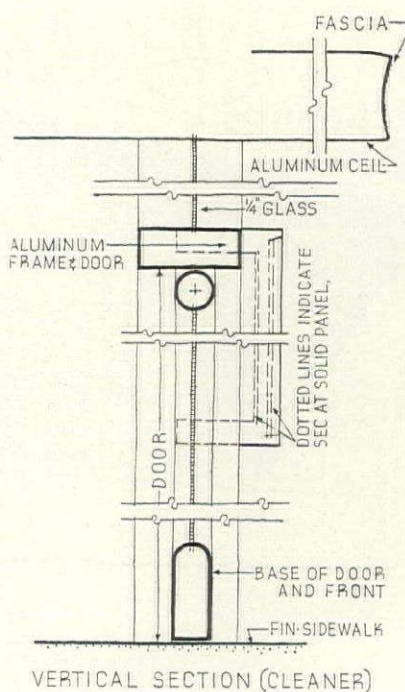
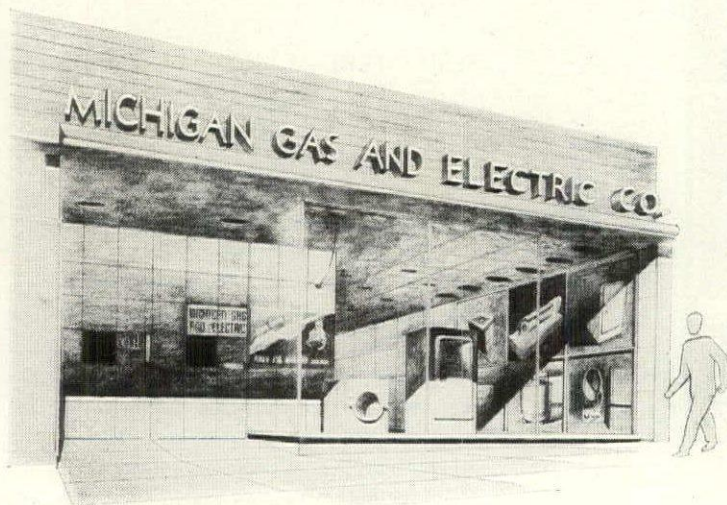
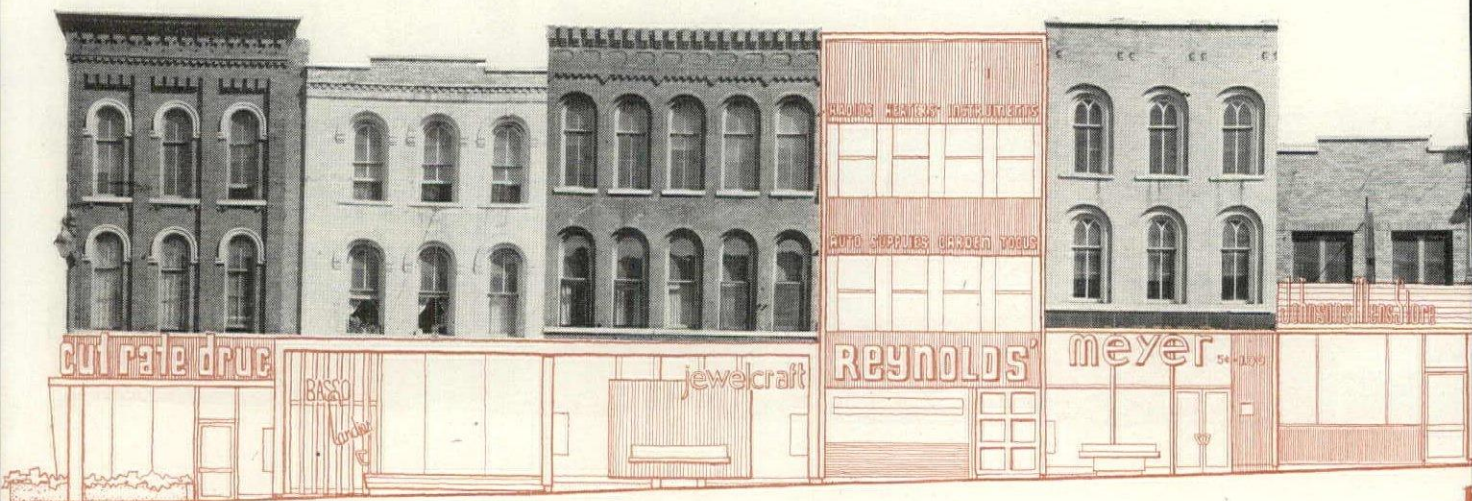
MEN'S STORE

Because of their location in adjacent buildings of similar size, this store and the two which follow will be remodeled as a group. Although each retains its identity, certain design elements common to all three will create a unified effect. Most significant individual change in the men's store will be the substitution of a large display case for two smaller existing windows. Sliding panels at the back will provide either a partial view of the store interior or an entirely closed showcase. Displays can be attached to these background panels and to the slotted window wall. An unsightly glass transom above the store will be replaced by prominent metal lettering on a grooved background.

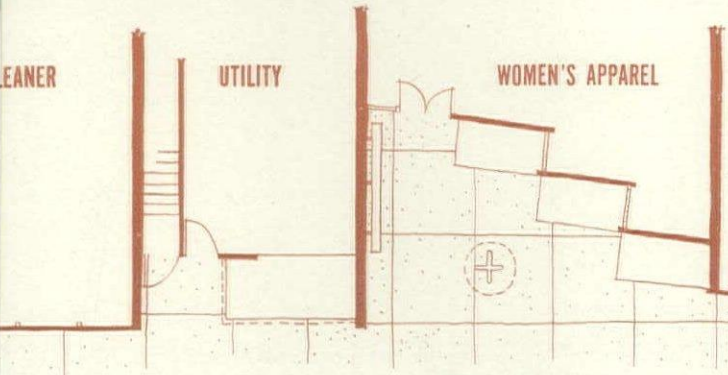
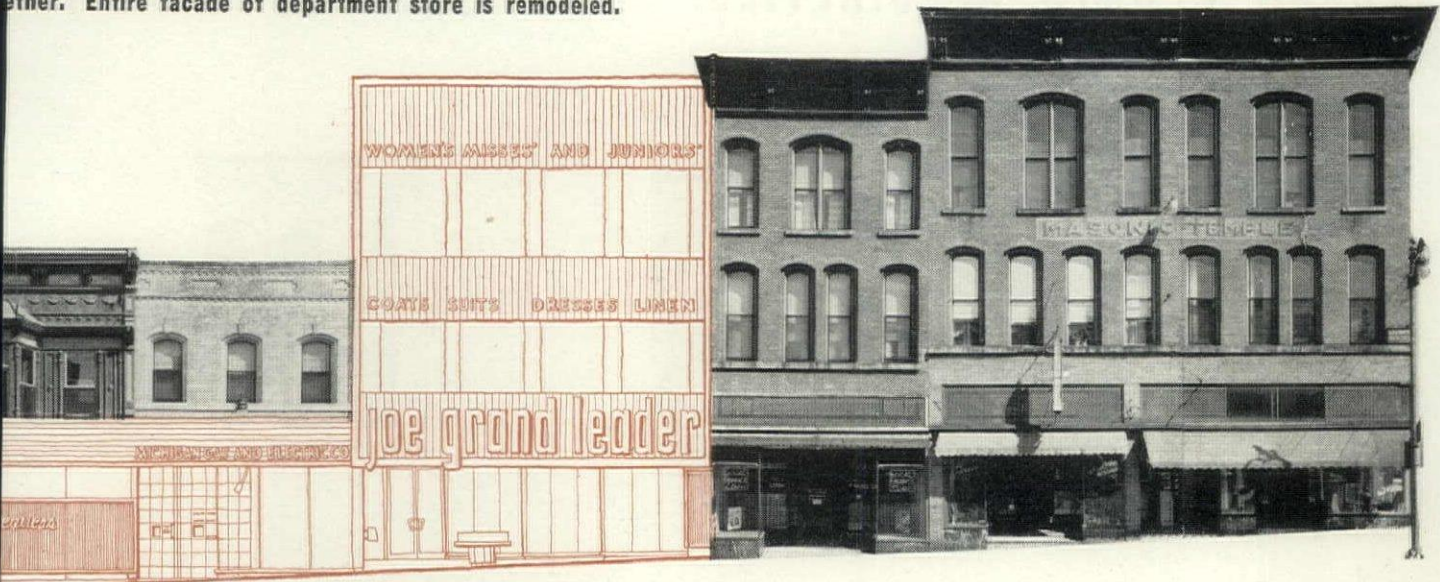


CLEANER, UTILITY, WOMEN'S APPAREL. A continuous sign panel groups three st

KETCHUM, GINA & SHARP, ARCHITECTS



ether. Entire facade of department store is remodeled.



CLEANER

Second in the planned three-store unit, this dry cleaning establishment has long needed a thorough modernization of its entire facade. Remodeling will unify the present patchwork of two show windows and door into a single front. The entrance door will be moved to the left and grouped with the adjacent door to the men's store. A simple billboard (executed in the same metal facing used below the men's store showcase) covers most of the glazed front and further correlates the separate stores. The upper sign panel is part of a continuous strip over the three stores, individualized in each case by distinctive lettering.

UTILITY

Third store in the group is an electrical appliance salesroom which will need proper sign identification, good pictorial display and an inviting interior. All these requirements are met in the new design. The left-hand door to an upper staircase and the adjacent door to the salesroom will be united into one display panel. A low bulkhead to the new show window, combined with full height glazing provides a good setting for large-scale appliances. The right-hand wall is utilized for photo murals of company products.

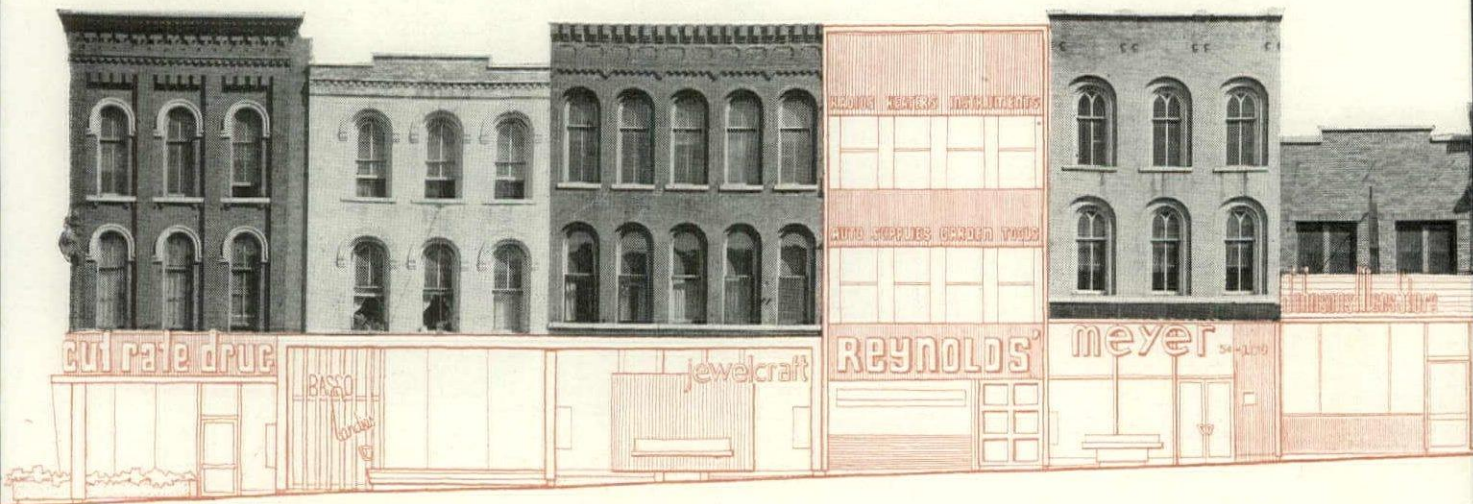
WOMEN'S APPAREL

The women's clothing store is one of two buildings which have a complete new facade. A metal surround like that used on the hardware store will wrap the perimeter of the upper stories and metal spandrels attached between windows will serve as sign backgrounds. Three large mannequin show windows to the right and a long accessory case to the left will lead shoppers back to the entrance.

LOANS, SPORTS, SPECIALTIES.

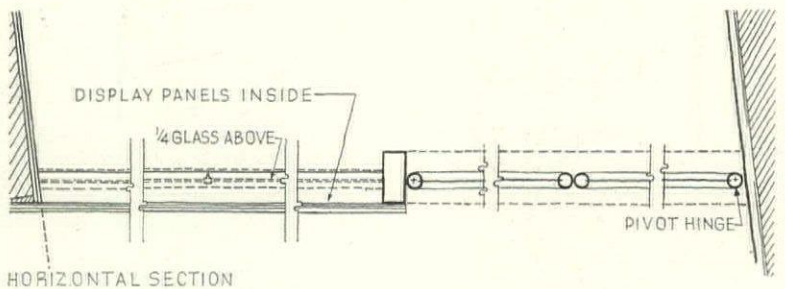
Integrated design unifies the last three stores on the block

KETCHUM, GINA & SHARP, ARCHITECTS



LOANS

Present show windows, a liability to the personal loan service, are eliminated in the new plans. In their place, three-quarters of the store front will be closed by an eye-level sign panel. This will shield the interior office space, but still assure it ample daylight. The entrance door, now in a central position, will be replaced by a pair of clear-vision doors at the side. Identical background treatments of the upper sign panel will relate the store to those on either side.



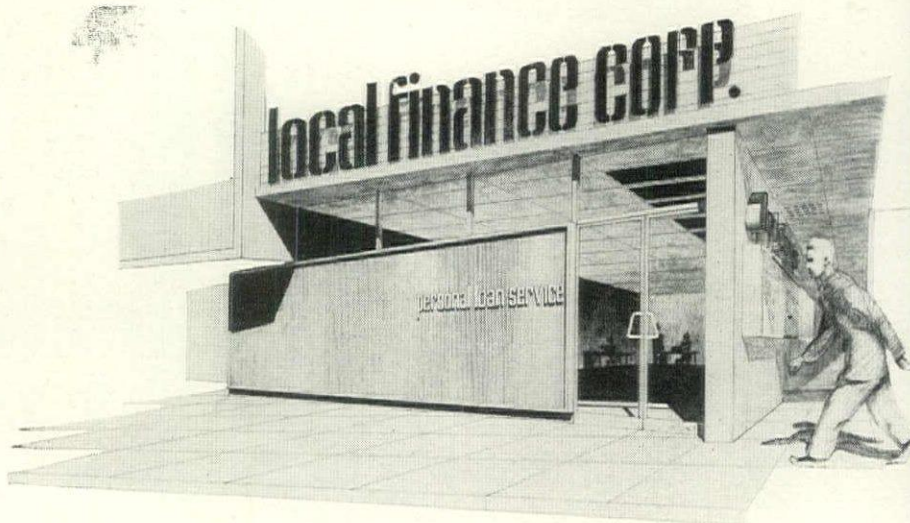
HORIZONTAL SECTION

SPORTS

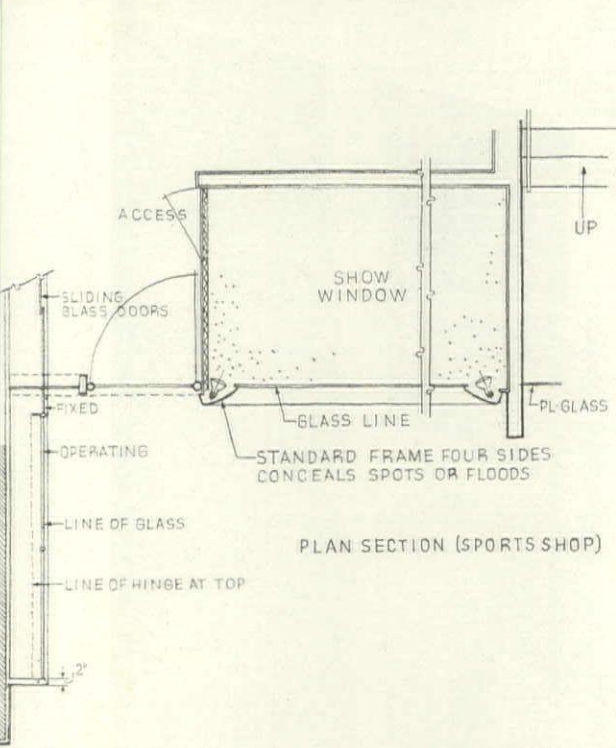
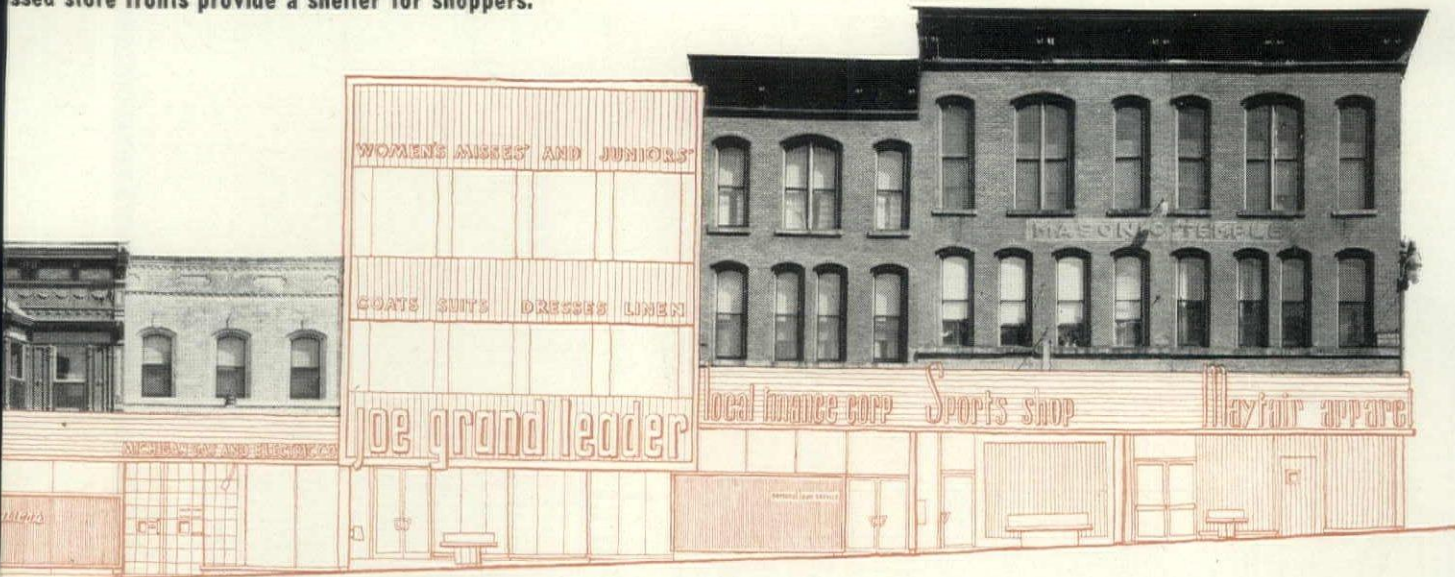
The last two stores on the block have been re-planned as a unit to take full advantage of their corner location. Store fronts will be combined to form a single display lobby, partially broken by a separating partition. Recessed windows will create a pedestrian short cut at the street corner and permit the use of shallow ramps instead of steps at the various entrances. The sports shop will have a small show case at the side and one large window.

SPECIALTIES

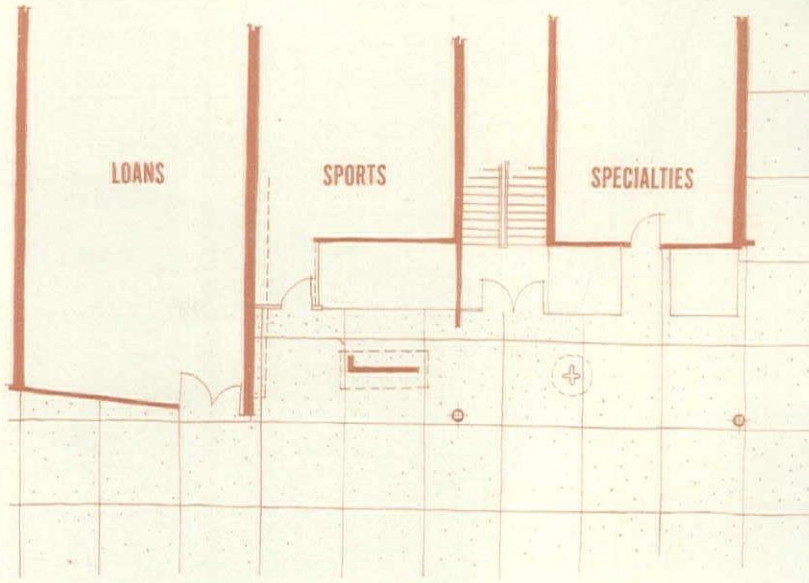
An upper panel, common to the finance corporation, sports and apparel stores, will be carried around the corner as a facing for the building on the side street. It will be used as a background for new signs and as a surround for the side street showcases. This treatment modernizes the appearance of the end of the block. A basement barber shop which at present is a confusing note will also be integrated in the new plans. A combined entrance which serves the barber shop and the upper floors of the apparel shop is aligned with the adjoining show window. Two large windows flank the street floor entrance.



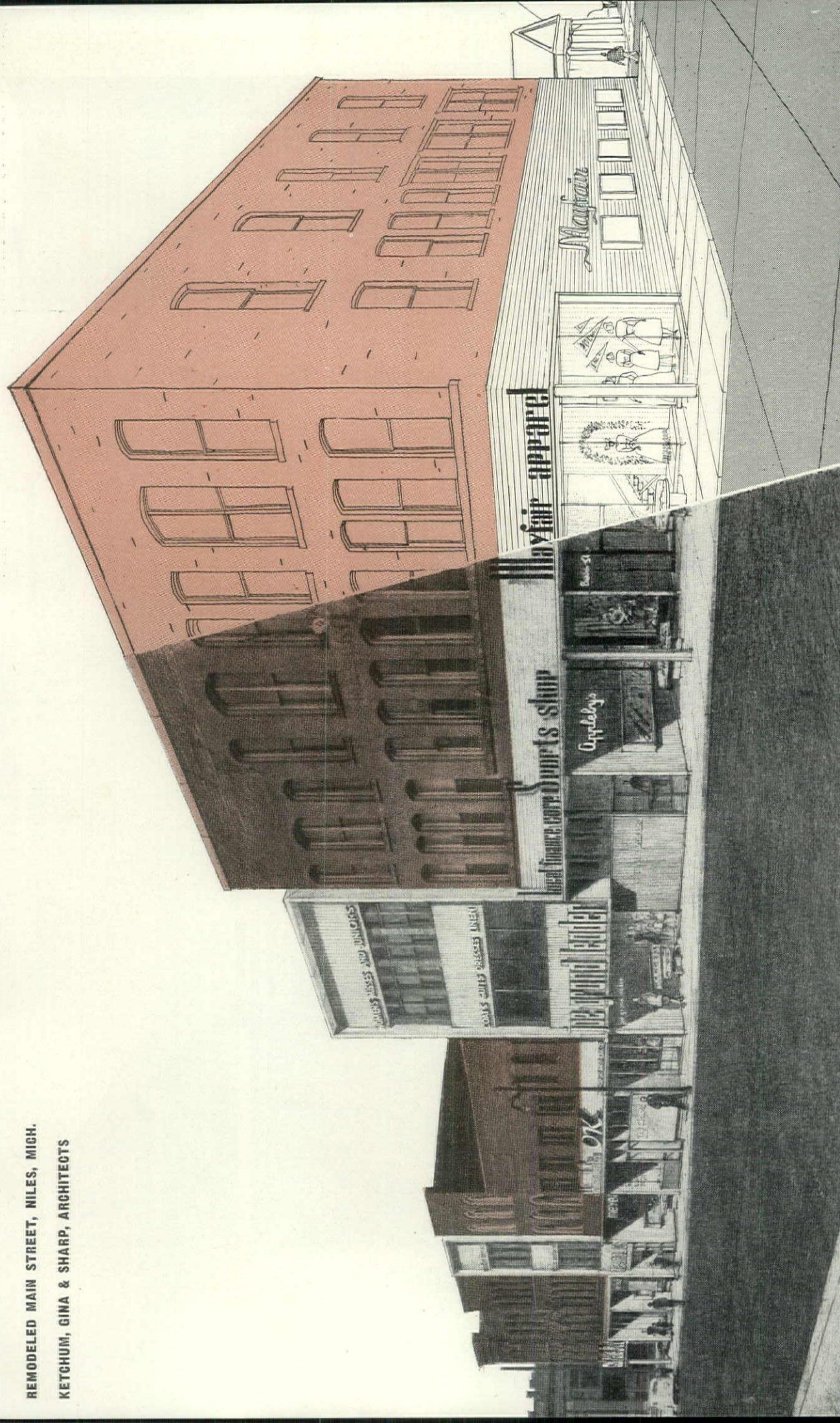
ssed store fronts provide a shelter for shoppers.



PLAN SECTION (SPORTS SHOP)



REMODELED MAIN STREET, NILES, MICH.
 KETCHUM, GINA & SHARP, ARCHITECTS



UNIFORM COLOR APPLIED TO THE UPPER FACADE OF EACH BUILDING CONSOLIDATES THE ENTIRE BLOCK. UNSIGHTLY BAY WINDOW AND CORNICES ARE REMOVED, PARAPETS ALIGNED

POSTWAR CIGAR STORE-HABERDASHERY. Design gives spaciousness to small site.



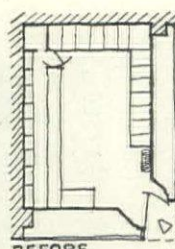
DONALD DESKEY attended the school of Architecture at the University of California and l'Ecole de la Grande Chaumiere in Paris. He is industrial design consultant to 33 corporations. One of his most famous interiors is Radio City Music Hall.

The Schulte cigar store, tucked between the stone columns of downtown office buildings, is one of the common sights of many a U. S. city. It is also a highly successful merchandising venture based on the unconventional mixture of tobacco and haberdashery. That Schulte should plan so drastic a departure from their established store pattern provides a convincing measure of the extent to which design will influence postwar merchandising.

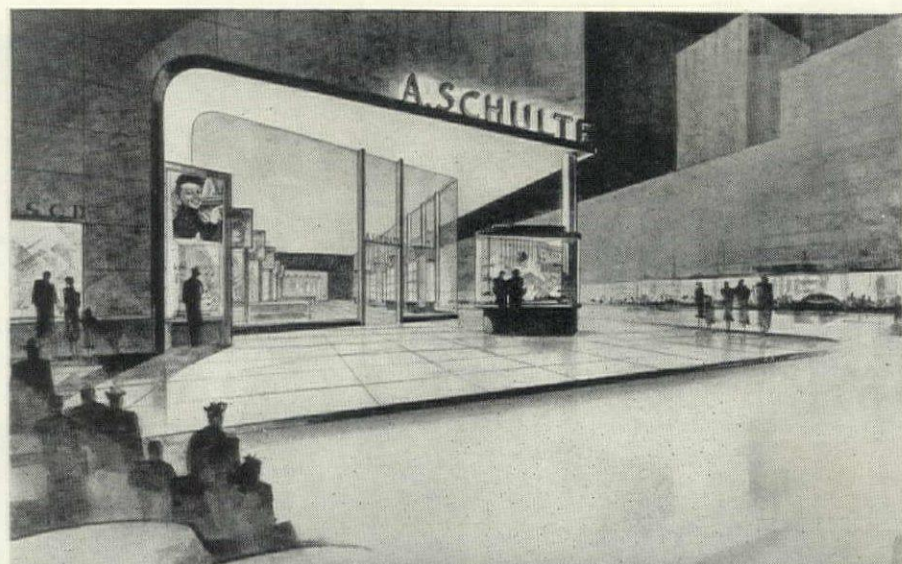
A number of extremely advanced ideas will be incorporated into the new stores. Most important, of course, is the replacement of show windows by an open front which turns the entire store into a display. Also significant is the setback of windows from the building line, eliminating the need for awnings and providing shelter for window shoppers. The slanting entrance wall encourages people to cut across the corner, offers greater ease of access and permits the addition of a unique "island" display case.

Combined tobacco, candy and magazine counters are located immediately alongside the two entrances. By pushing a button, one of the front panels can be lowered beneath floor level to allow sidewalk sales from the nearest counter. Along the interior sidewall, rotary units in a sawtooth pattern provide full display of haberdashery in a small space.

Photos: Ben Schnall

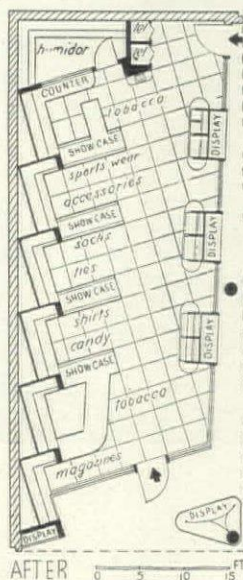
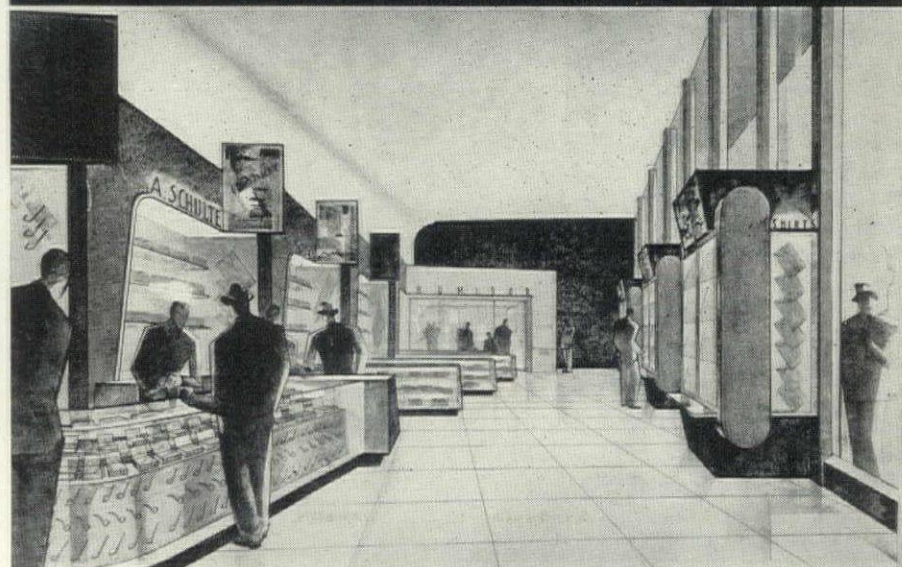


PRESENT LAYOUT IS OVERCROWDED, FUTURE PLAN OPEN, UNCLUTTERED



ENTIRE STORE IS CONCEIVED AS A HUGE, RECESSED "DISPLAY WINDOW"

INTERIOR AFFORDS MAXIMUM PERIMETER FOR SHOWCASES AND OPEN STOCK





ROBERT FASH studied at Mechanic's Institute, Columbia and CCNY. For fifteen of his 25 years of architectural practice he has been the architect for United Cigar and Whelan Drug Stores.

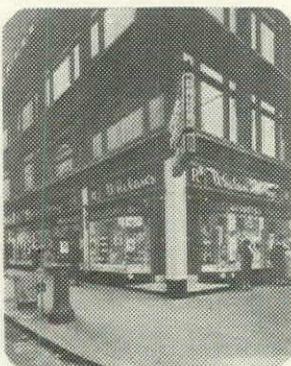
Since the day, a good many years ago, when the American drugstore broke an all-time record for atrocious merchandising it has been in the throes of an interesting development, provoked mostly by the good example of its stiffest competitor, the five and ten cent store. The two stores chosen for this project illustrate the present trend toward modernization. While none of the proposed changes are radical in character, they have the effect of a general clean-up which will help raise merchandising caliber and improve circulation. In the case of the smaller drugstore, only one or two major changes are to be made; the counter behind the soda fountain will be moved to the outside wall and the over-all length of the fountain slightly reduced by a slanted corner. An eye-level window over the rear counter will provide a view of the street. Three showcases in the center of the floor create additional display space and act as circulation barriers between the soda fountain and the sales department.

The more pretentious scheme for the larger drugstore relocates an existing liquor store which cuts into the present space. Two new entrances replace the present three. Circulation is again controlled by centrally located showcases. A cul-de-sac at the rear formed by the new liquor store and prescription department contains the telephone booths.

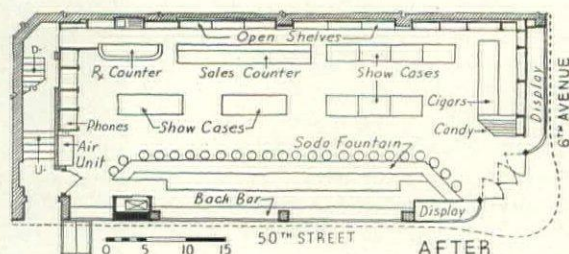
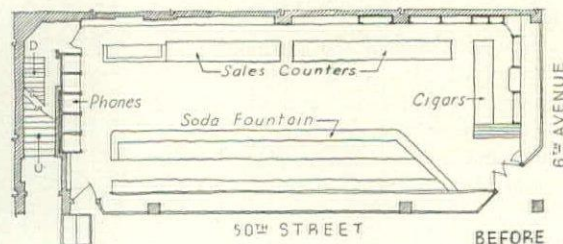
Both schemes were designed with an eye to postwar equipment miracles. They also put more than customary emphasis on the prescription department since it is believed that in drugstores of this type the pharmacist's work should be handled in a more scientific fashion. Mixing bowls and other equipment used in the compounding of drugs will be sterilized on the spot and kept in special sterile compartments.

On the exteriors, colored, nonbreakable glass will be used for bulkheads, cornices, window moldings, etc. The present porcelain enamel signs will be replaced by relief lettering executed in glass, plastic or metal.

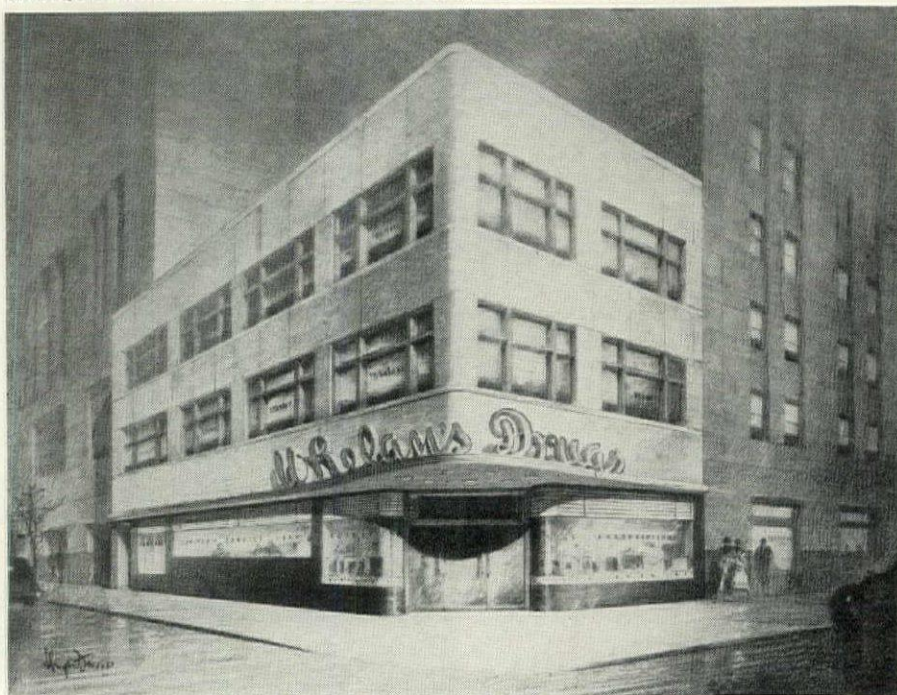
The designs indicate that drugstore owners are at last awakening to the fact that it is possible to display quantities of small articles in a way which insures a pleasanter shopping environment.



PRESENT VIEW IS DRAB



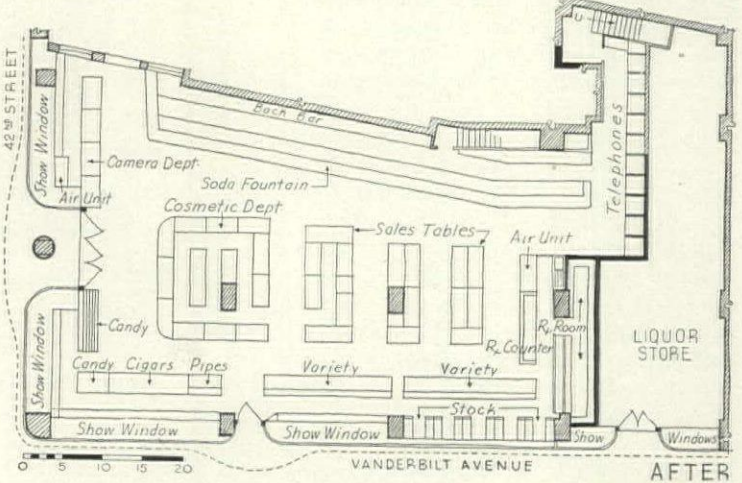
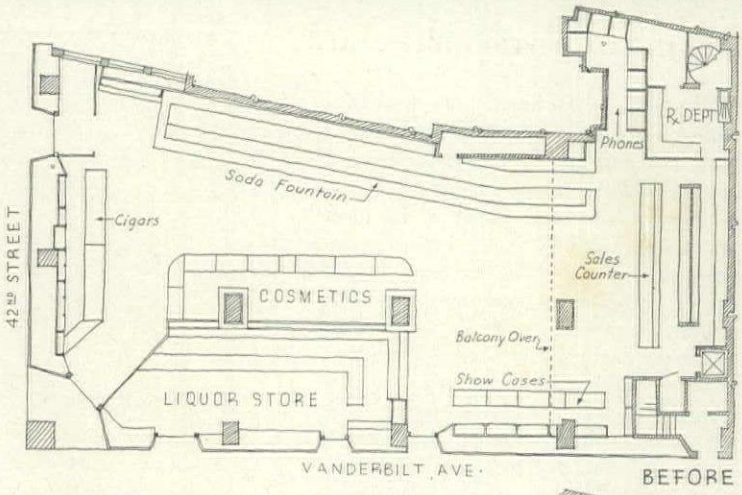
MARQUEE AND UNOBSTRUCTED ENTRANCE INCREASE STORE'S PROMINENCE



and interiors complete with humidified tobacco counters, sterilizing equipment for dishwashing and fluorescent display lighting.



ENTRANCES ARE ALL BUT INDISTINGUISHABLE



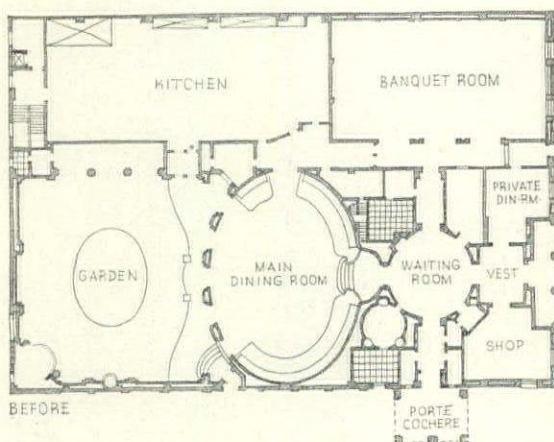
CURVED RETURNS MAKE ENTRANCES INVITING BAYS. SIMPLE TREATMENT BLENDS WITH CLASSIC BUILDING STYLE



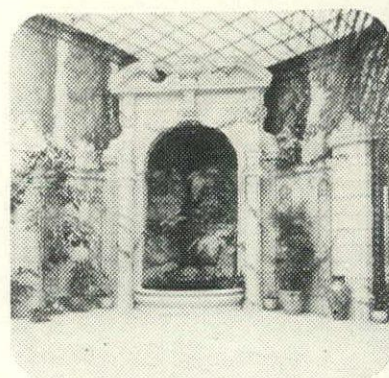
ADRIAN, LTD., BEVERLY HILLS, CALIF.

Hollywood, the home of beautiful women, has its own idea of the settings they look best in. Both its domestic and commercial architecture currently shows a trend to the chic which at its most restrained resolves itself into streamlined baroque and in its flamboyant stage becomes confectioner's gothic. Adrian's new establishment, which used to be the fashionable Victor Hugo restaurant, falls somewhere between the two. Avoiding the plaster curlicue, it nevertheless makes use of floating columns, oriental canopies and an analogous color scheme called glamorose. The general form of the reception rooms was kept, although much effort appears to have been expended in changing an ellipse into a circle.

The vestibule was given mirrored walls and retains its marble floor. Unpolished plate glass balustrades lead to the circular salon with its 16 ft. high ceiling. Cold cathode and recessed down lighting bathe Immediate Wear customers in a rosy, flattering glow. The square Custom Salon has a stage for models, and furniture designed by Adrian himself, who dreams up his creations in an adjoining room.

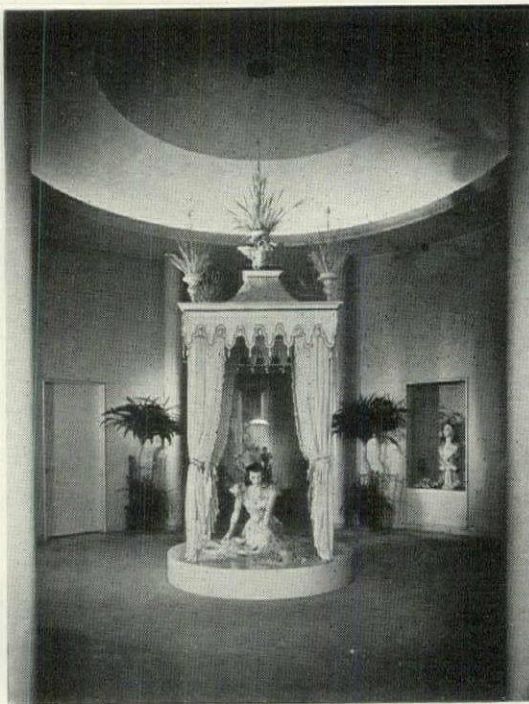
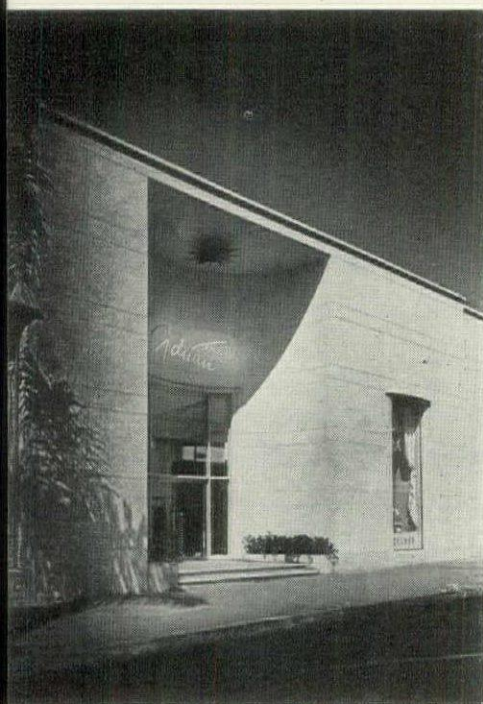


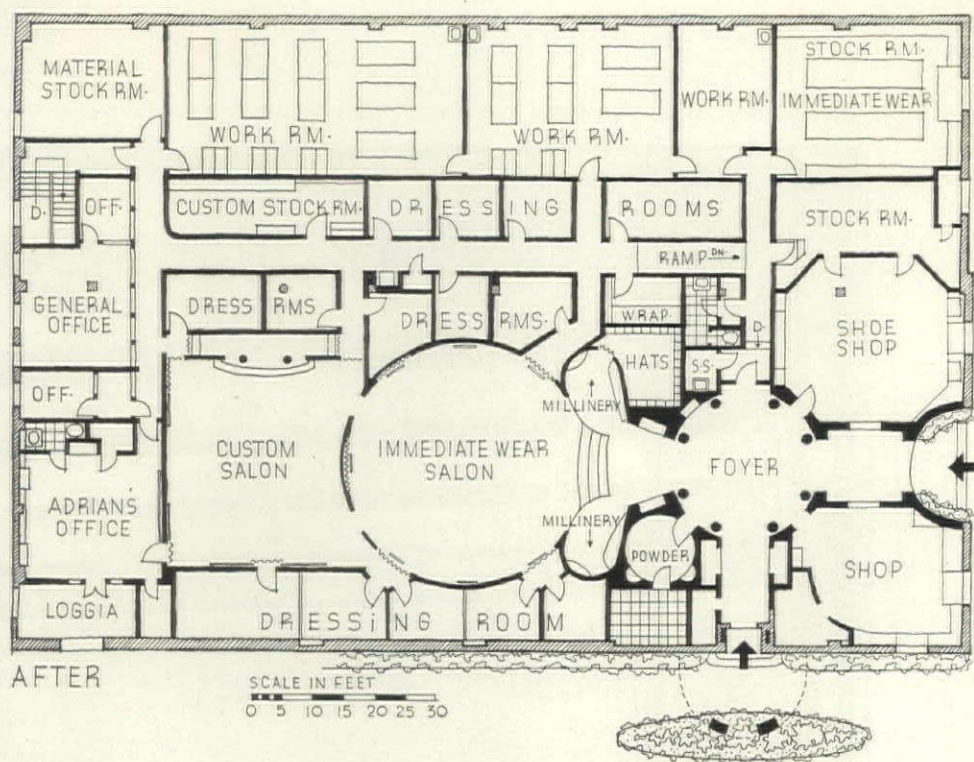
OLD FOYER AT VICTOR HUGO'S



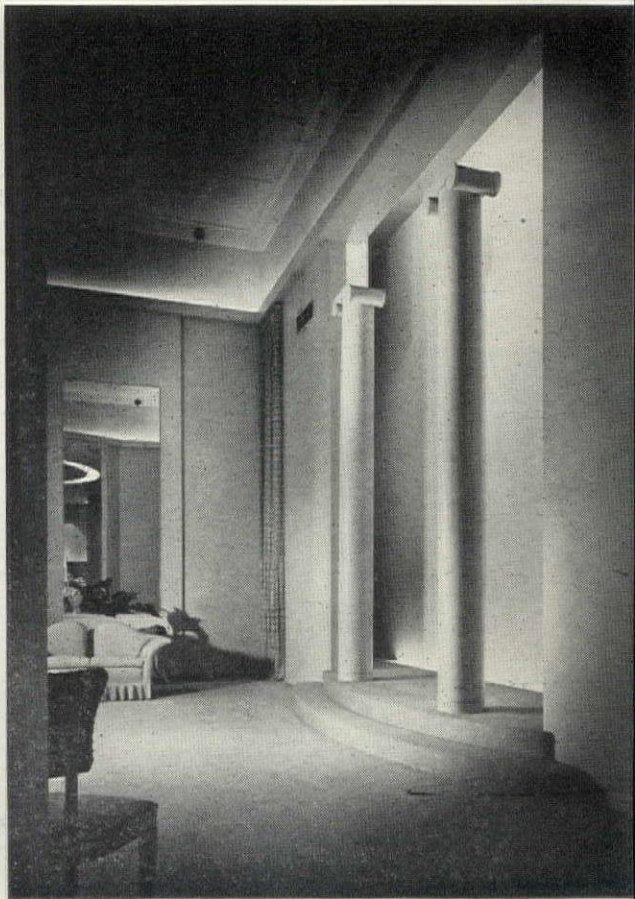
GARDEN IN FORMER RESTAURANT

CORE OF THE NEW PLAN IS A GLAMORIZING SUITE OF RECEPTION ROOMS. FROM ENTRANCE THROUGH VESTIBULE EN





READY-TO-WEAR AND CUSTOM SALON AND INTO ADRIAN'S PARLOR, THE EMPHASIS IS ON FLATTERY AND CHARM



DRESS AND SPECIALTY SHOP. Conservative upper Fifth Avenue responds to a bright yellow

MARY LEWIS, INC., NEW YORK, N. Y.

This dress shop, which brashly broke into print last spring (see ARCH FORUM, June, '44, p. 55) with its yellow wooden door, has none of the elegance of its more staid neighbors, whose inspiration was the Beaux Arts tradition of the Rue de la Paix of yesteryear. But the inviting, sensible quality of its design is more in keeping with the future of American fashion than with the French chic of the past.

The former tenant's Parisian taste for dark mahogany cases of impeccable but gloomy respectability has been displaced by bright colors and an informal, open floor arrangement that eliminates the usual stock fixtures. White canvas is laced up as an impromptu wall, pink canvas and jade green curtains brighten the dressing rooms in the rear, yellow rectangular strips in the black asphalt tile floor repeat the bright cross-hatching of the now-famed door.

On the side walls are cases for blouses, sweaters, etc., and on the floor are simple tables for smaller items. A pole and canvas projection in the middle of the shop shields two dressing rooms, while its outer poles serve as informal hat racks. Up two steps, in the rear of the shop, are four more dressing rooms and the cashier's desk.

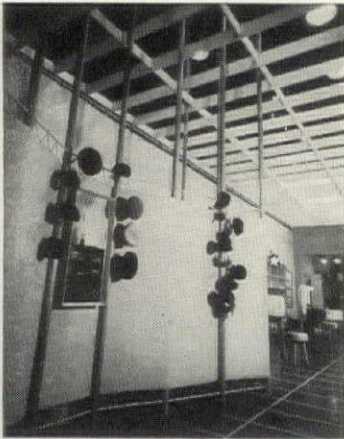
The second floor, used for junior miss styles, is equally informal. In the rear are buyer's and cashier's facilities, four dressing rooms; in the front a stock room flanks the general shopping area.

WHITE WOODEN GRILL LOWERS CEILING, HIDES SIMPLE LIGHTING INSTALLA

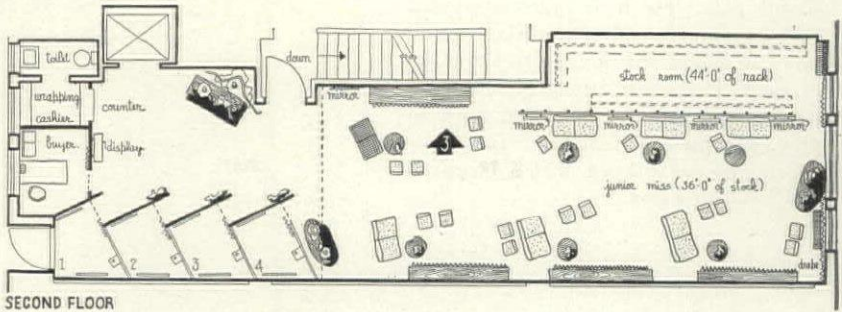
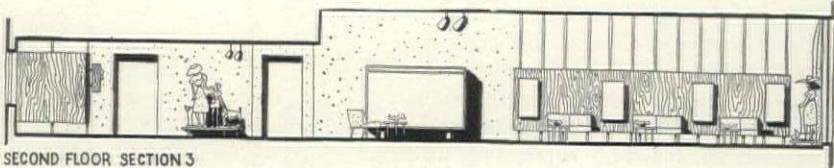
OPEN-BACK WINDOW FOR DISPLAY



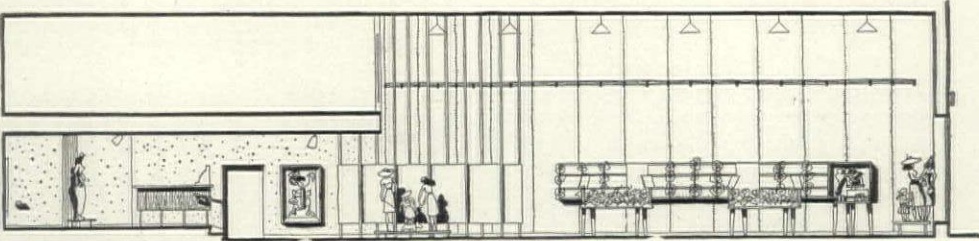
INFORMAL RACKS FOR HATS



Photos: Ben Schnall

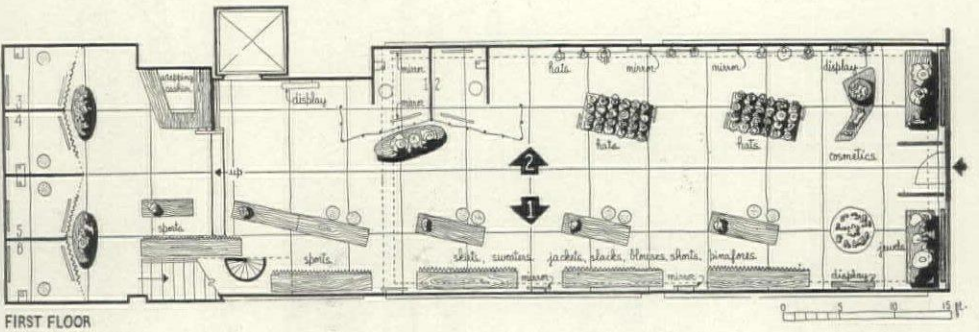
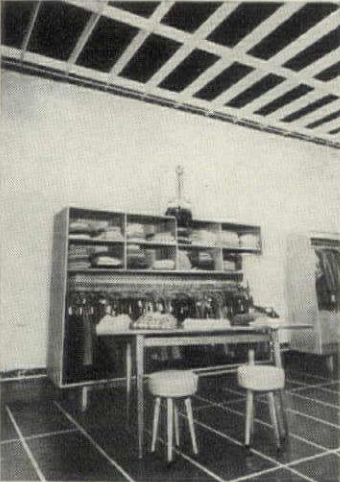


SIMPLE, PORTABLE FIXTURES

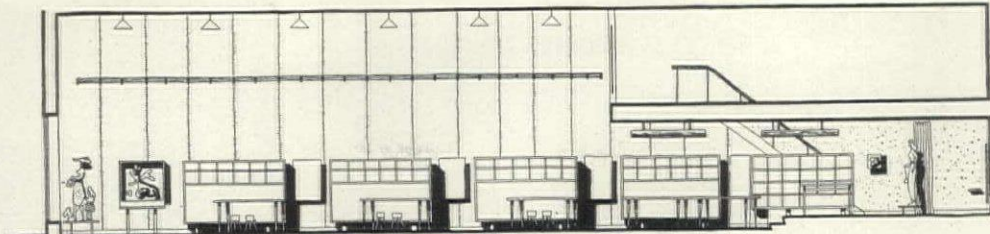


FIRST FLOOR SECTION 2

CASES ARE NATURAL BIRCH



FIRST FLOOR

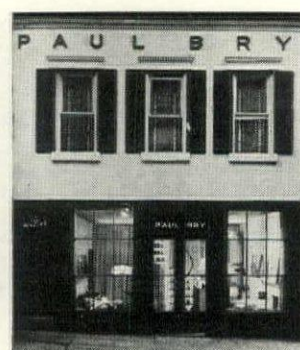


FIRST FLOOR SECTION 1

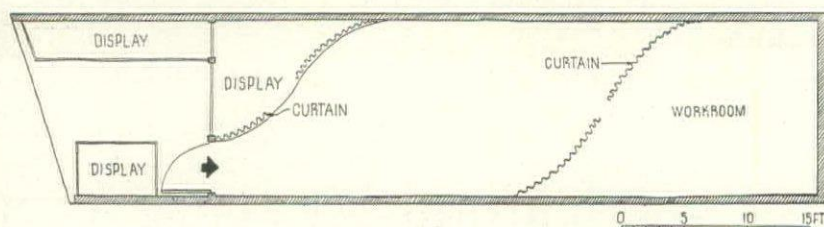
TERRY HATS, WHITE PLAINS, N. Y.

Simplification of details, bold contrasts, and original uses of wood and glass are the basis of this designer's technique, whose headquarters show a generous use of natural redwood contrasting with white painted brickwork to form a unified new exterior.

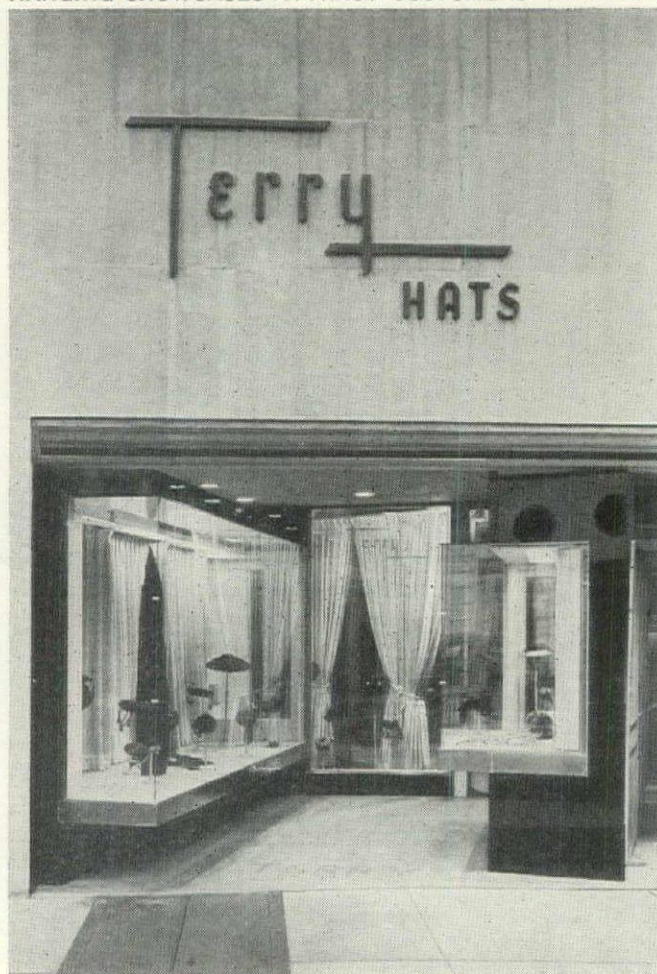
The hat shop (below), has a black glass arcaded front and an extremely simple plan. The floor space is divided only by sinuous velvet curtains, which serve to break the long interior. One of these forms the background to the window display and is pulled back to give a glimpse of the interior. The dressing tables are draped with chartreuse and oxblood rayon.



DESIGNER'S OFFICE BEFORE AND AFTER REMODELING



HANGING SHOWCASES ATTRACT CUSTOMERS' INTEREST



CURTAIN BACKDROP FORMS PART OF WINDOW DISPLAY



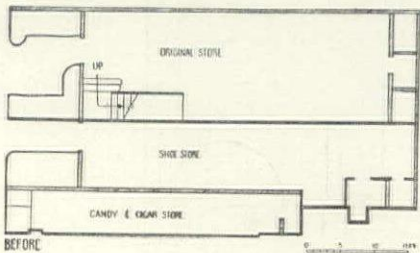
CONDE STORE, WHITE PLAINS, N. Y.

Three old stores—the smallest a tobacco shop—were converted into the dress shop shown on this page. A staircase was remodeled and made the central feature of the design, flanked by showcases of sandblasted western pine. This wood was also used for dress compartments on the upper floor and cut in a Dutch scallop pattern to fit the curved end of the display section.

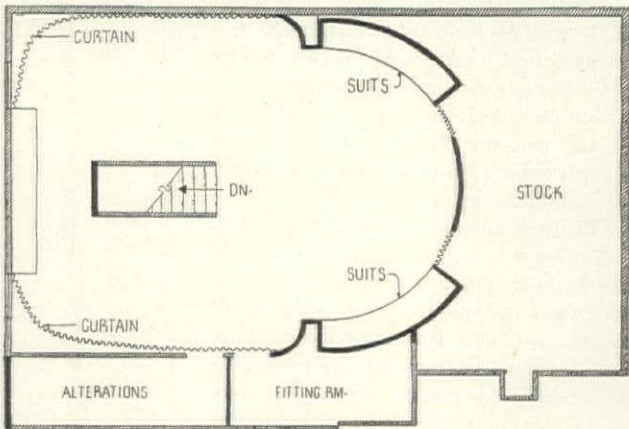
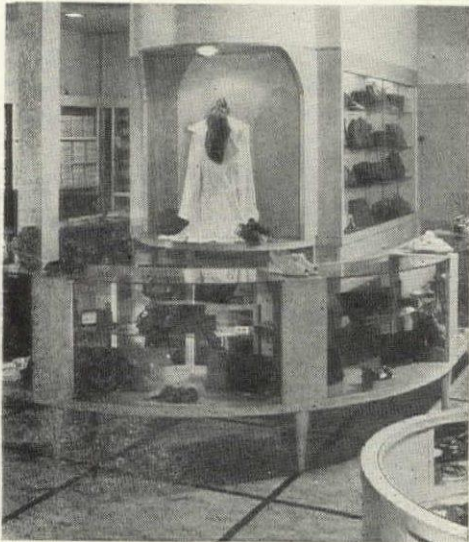
Photos: Ben Schnall



SPACE AROUND DRESS SHOP STAIRWAY IS USED FOR ACCESSORIES

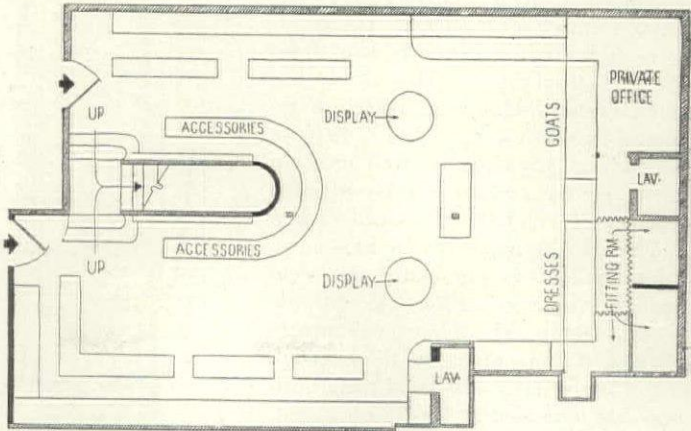


HORSESHOE CASE IS BUILT OF PINE WOOD



SECOND FLOOR

SCALLOPED OPENING FRAMES CLOTHING



AFTER FIRST FLOOR

0 5 10 15 FT

CHAIN BOOKSTORES.

A series of cluttered, dimly-lit bookshops are converted into open, well-organ

DOUBLEDAY DORAN BOOKSHOPS NEW YORK, N. Y.

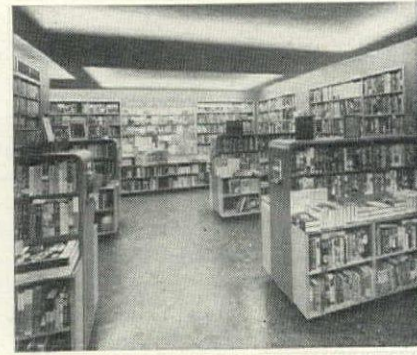
When the typical bookjacket spoke in a whisper instead of a shout, the conventional bookstore was expected to be dreary, cluttered and dark. Breaking sharply with this Greenwich Village tradition these remodeled Doubleday Doran bookshops have been designed with an eye to their up-to-the-minute contents, and an air of gaiety is their most significant feature. Striped wall papers and display cases in light woods contribute much to this effect. Exposed fluorescent lamps provide brighter-than-usual lighting. The popular open front found in many of the other types of stores in this issue has invaded the bookshops, producing an atmosphere of lightness and space impossible to achieve otherwise.

Because merchandising is the basic problem in designing a shop of this type, the architects were anxious to discover the best possible display arrangement. This was no easy job. The fairly uniform size of books makes for monotony even though each cover is an individual attention seeker. Added to this difficulty is the constant flux of daily stock—a supply which often amounts to 14,000 or 15,000 books.

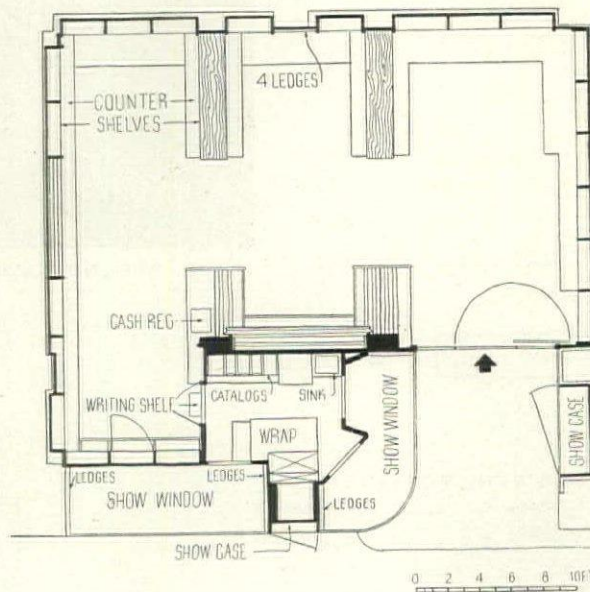
To overcome these natural handicaps, planning was based on a few carefully worked out ideas. Most important decision was to feature front display of books, a device requiring more space but having ten times the sales appeal of former spine display. Special shelves and cases were designed to accommodate books placed in this position.

Two other ideas strongly influenced the store designs: one, the decision to group stock as to subject matter for quick location of any book. The other, to route browsing customers away from the main traffic flow. The usual cluttered center tables were therefore replaced by neatly arranged side displays which form bays along the wall and help break up the confusing mass which a number of colorful books can create.

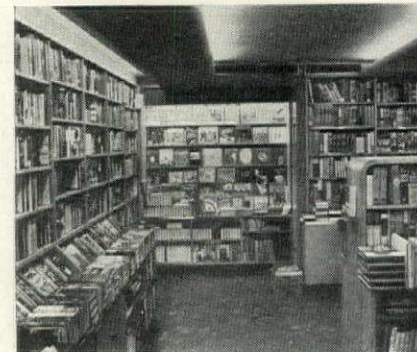
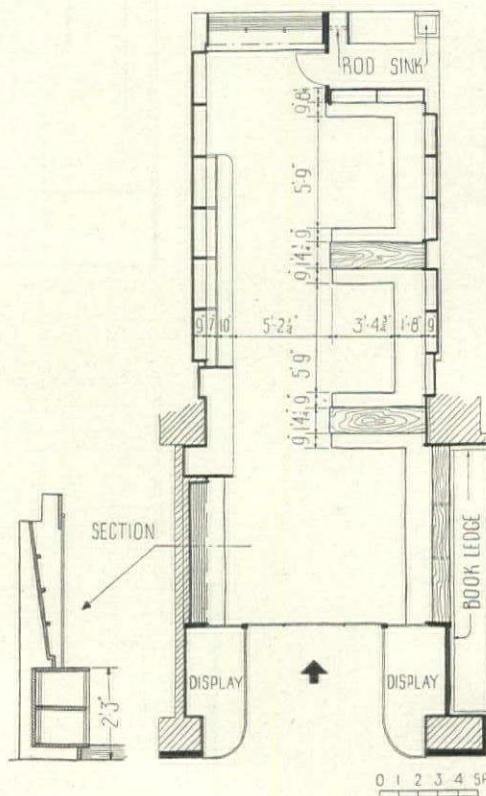
The plans throughout were kept open, tables and aisles eliminated and convenient wrapping facilities made an important feature. The tremendous success of the first shops prompted the remodeling of twelve more. In all of them business has increased at least 25 per cent.



ORDER REPLACES CONFUSION IN GRAND CENTRAL TERMINAL SH



NEW LOWER LEVEL SHOP, PENN. R.



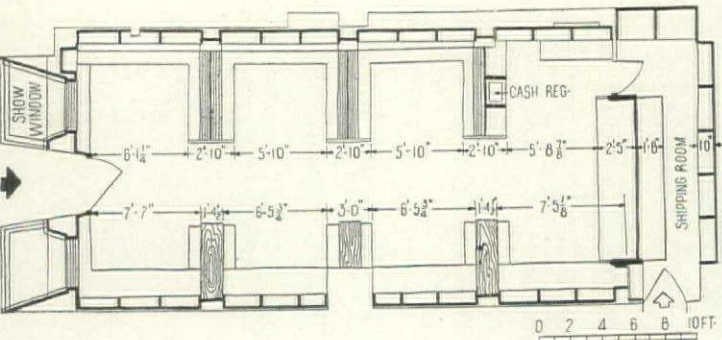
s units by the replanning of floor space and sensible grouping of books. Side displays replace former center tables.



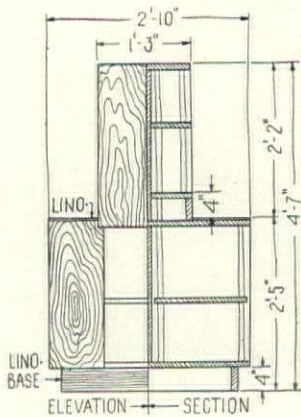
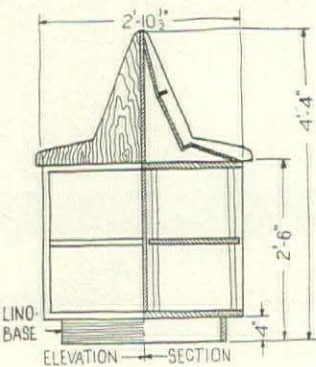
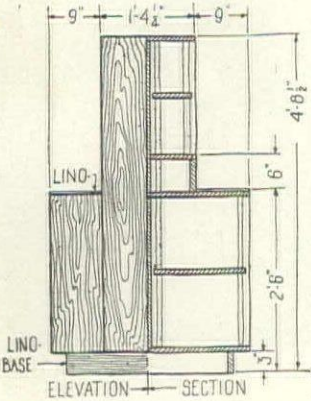
SHELVES FRAME EACH GROUP OF BOOKS. ARRANGEMENT BY SUBJECT PERMITS QUICK LOCATION OF ANY VOLUME
OPEN FRONT REVEALS ORGANIZED INTERIOR. DISPLAY CASES FORM BAYS, A SENSIBLE USE OF SMALL SPACE

Doubleday Doran Book Shop

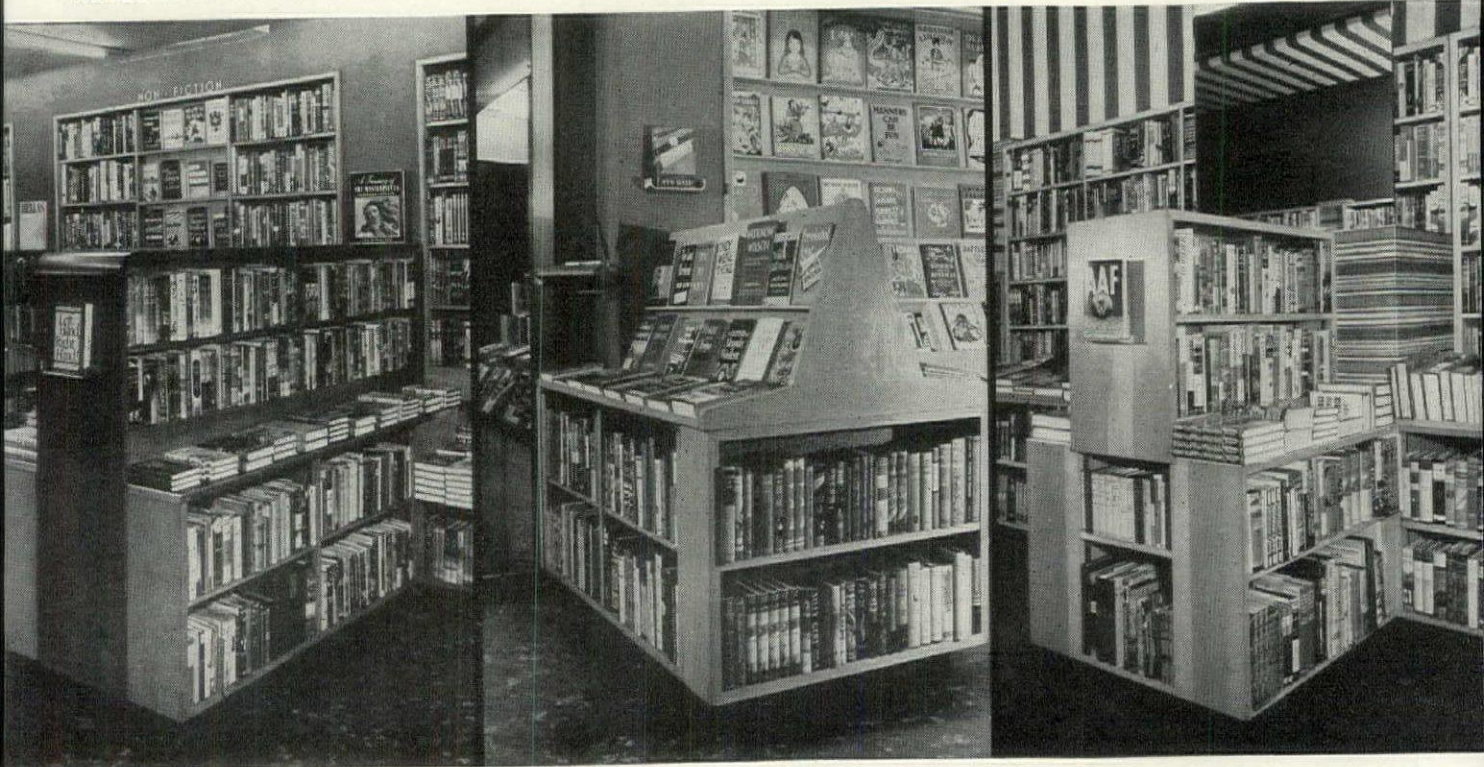




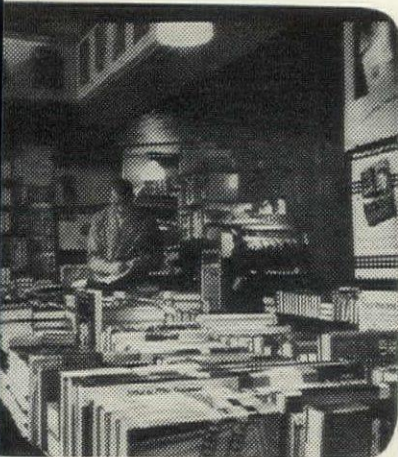
BOOK SPACE IN AIRLINES STORE IS FLEXIBLE



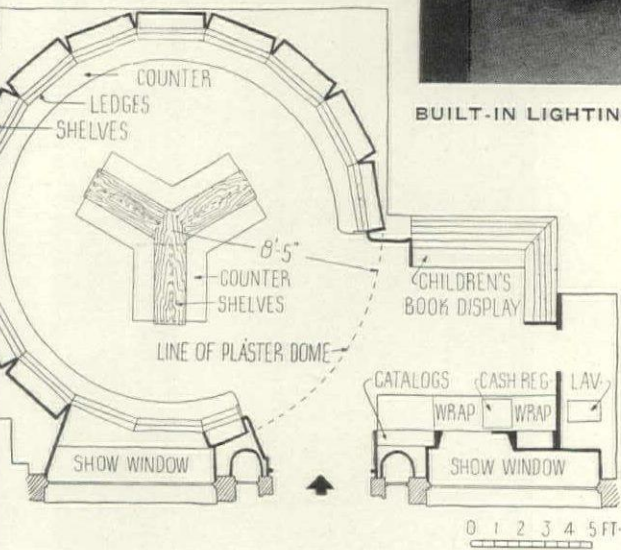
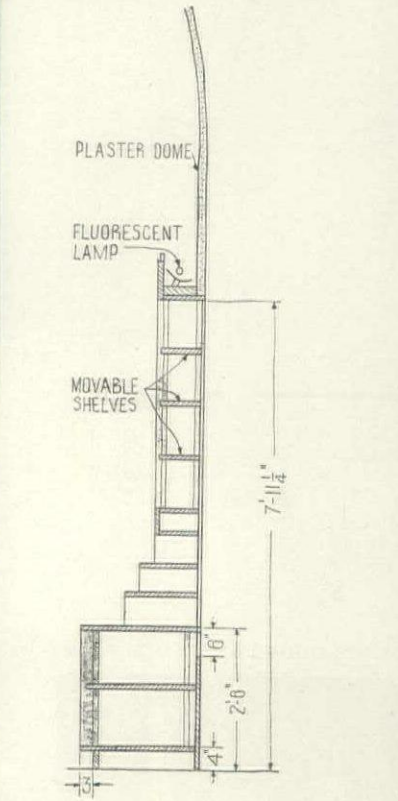
NOVEL DISPLAY UNITS SHOW BOOKS TO ADVANTAGE. NOTE HOLDERS AT ENDS OF CASES, STRIPED FABRICS



res as the base for functional decoration of the ceiling. Every inch of wall space is used for display.



FORMER UPSTAIRS SHOP, PENN. R.R.



BUILT-IN LIGHTING, AIR CONDITIONING AND LETTERING CONTROL CEILING DESIGN

FINISHES AND EQUIPMENT: **Grand Central Terminal Shop:** CABINET WORK—white oak, Gilbert Murtagh, Inc. LIGHTING—Underwriters Electric Co. Fluorescent ballasts and lamps—General Electric Co. Lighting strips—Pittsburgh Reflector Co. **Penn. Station Upper Level Shop:** CABINET WORK—Ross-Frankel, Inc. LIGHTING—Underwriters Electric Co. WALL COVERINGS: Fabrikona—H. B. Wiggins. **Airlines Terminal Shop:** CABINET WORK—Robert Lutze. LIGHTING—Underwriters Electric Co. Fluorescent ballasts and lamps—General Electric Co. Lighting strips—Pittsburgh Reflector Co. FLOOR COVERINGS—Kentile Asphalt Tile. GENERAL CONTRACTOR: FRANK A. POSCHER. **Penn. Station Lower Level Shop:** CABINET WORK: White oak—Gilbert Murtagh Inc. Lighting—Underwriters Electric Co. FLOOR COVERINGS—Asphalt Tile—Armstrong Cork. WALL COVERINGS—Fabrikona—H. B. Wiggins. HARDWARE—Penn Brass & Bronze Co. GLASS—Herculite Doors and Panels—Pittsburgh Plate Glass Co. GENERAL CONTRACTOR: GILBERT MURTAGH INC.

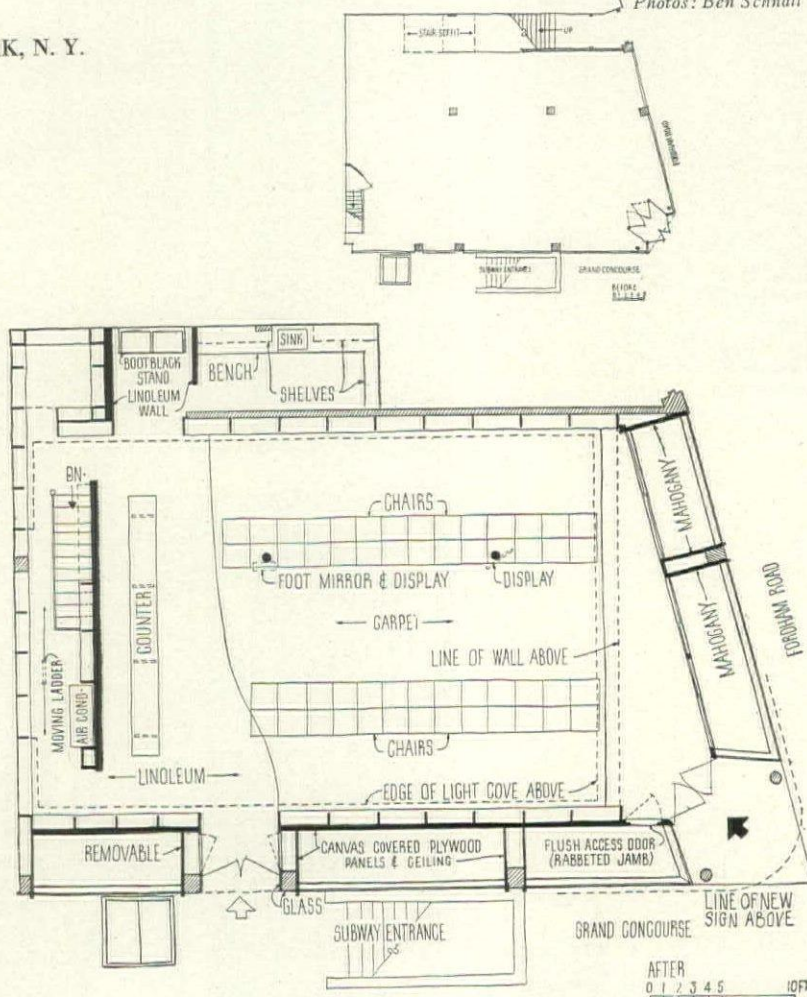
LONDON CHARACTER SHOE STORE, NEW YORK, N. Y.

Located in a busy retail district of the Bronx and finding its old store too small for potential business, this firm moved to an adjoining corner site replanned for increased sales. Some of the requirements met by the architects were: an open plan to accommodate large numbers of customers, shoe stacks accessible to salesmen of average height, and show cases at a good height for either seated or standing customers.

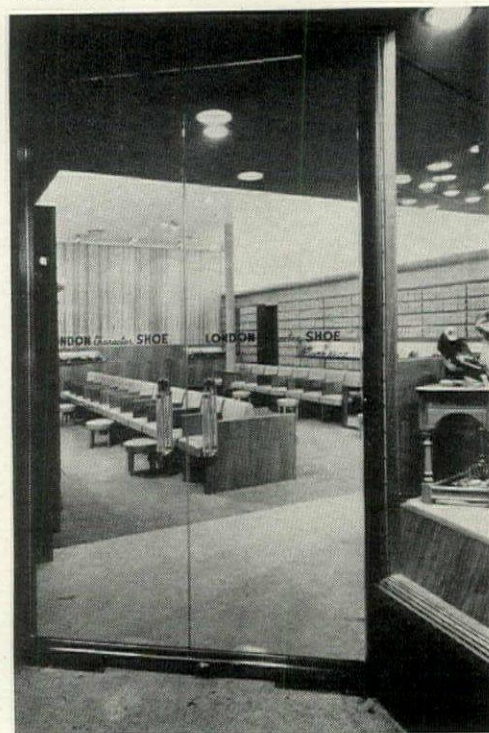
Logical planning developments led from the attention given to display. Show windows on the Fordam Road side are backless, to open the interior to the street. On the Grand Concourse side they are backed with plywood and yellow canvas, on the principle that a light background reduces the mirror-like quality of the glass. These windows have removable access doors at the ends, enabling the shoe stacks to extend almost the full length of the interior.

Passers-by get wide views across the low seating accommodation to the decorative box-ends and the cypress screen at the back of the store, which hides a staircase and air conditioning unit. In front of the screen is a combined show case and wrapping counter (see detail). The rear of the store is largely for service, and has a linoleum floor covering. The curved line on the plan marks the beginning of an all-over carpet which covers the customer section. Thoughtful details of this kind also include a shoe shine stand for busy purchasers.

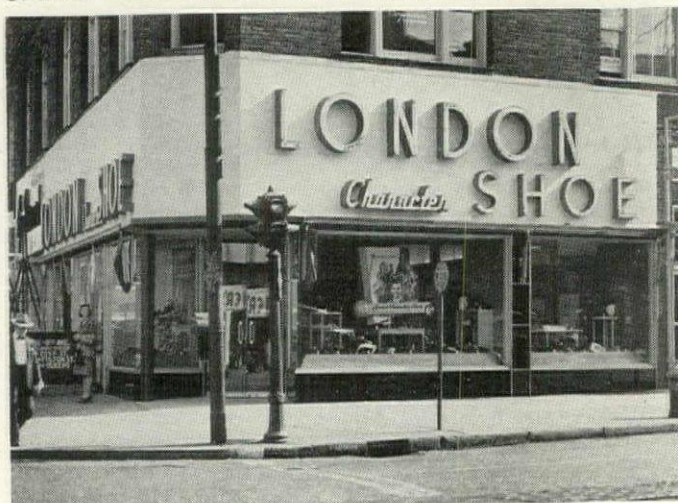
Photos: Ben Schnall



TEMPERED GLASS DOORS OPEN INTERIOR



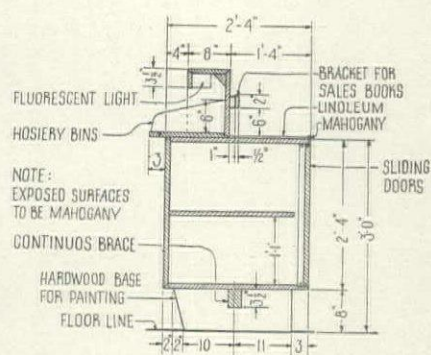
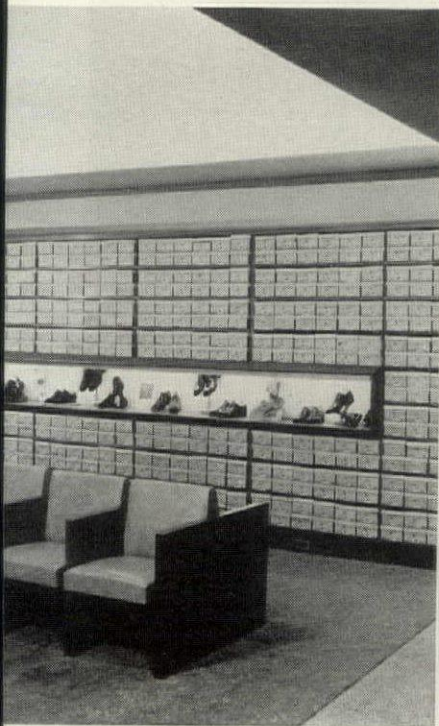
UNLIKE ARCHITECT'S DESIGN TENANT DISPLAY IS FUSSY



Gottsch-Schleisner

A black and white photograph of a modern interior space, likely a lounge or waiting area. The room features long, low, modular seating with light-colored cushions and dark wooden frames, arranged in a U-shape. Small, round, light-colored tables are interspersed between the seating. The walls are covered in a grid of small, square tiles, and a large, vertical, pleated curtain hangs in the background. The floor is dark and polished.

PLAY CASES ARE SEEN FROM CHAIRS SALES COUNTER CONTAINS HOSIERY BINS

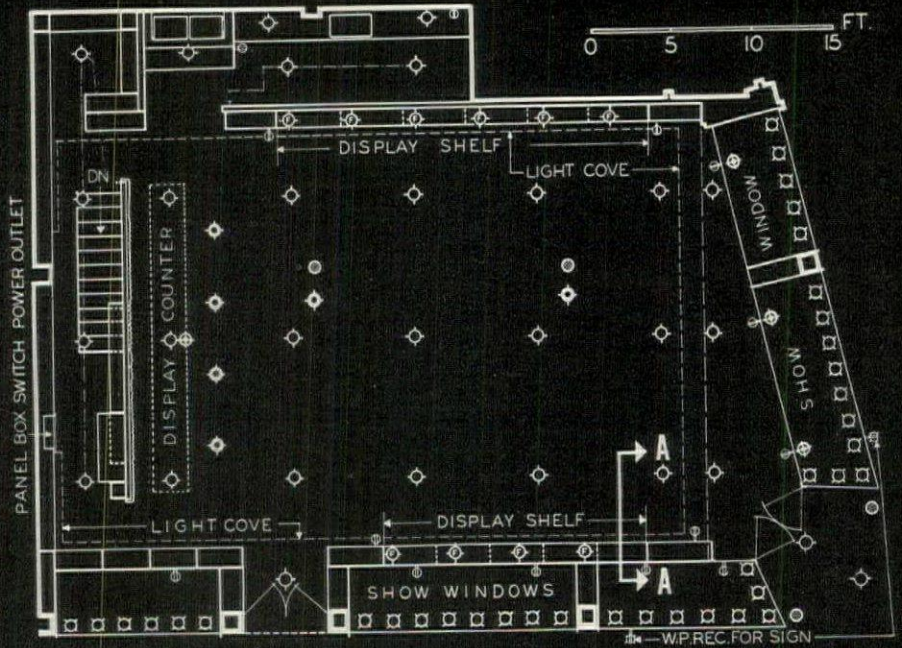
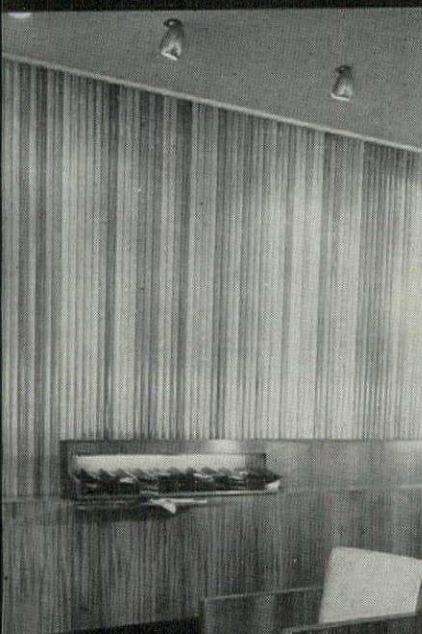
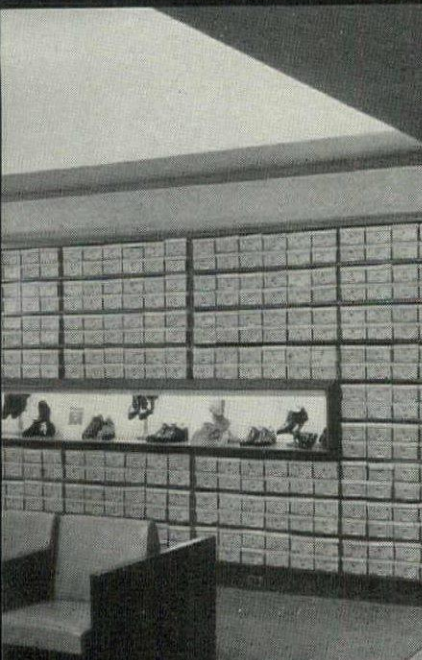


INTERIOR PARTITIONS—stud and plaster on plaster board; cypress poles. FLOOR COVERINGS: Linoleum—Armstrong Cork Co. Carpet, terrazzo. TRIM: Painted wood. Mahogany, natural finish. GENERAL CONTRACTOR: JAFF BROS. WOODWORKING INC.

STORE LIGHTING

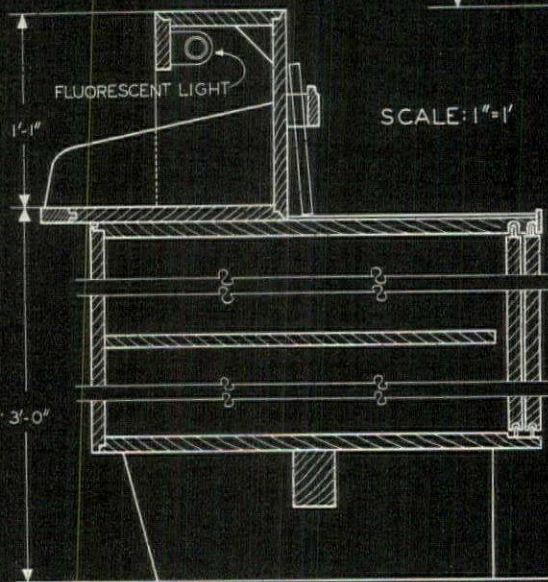
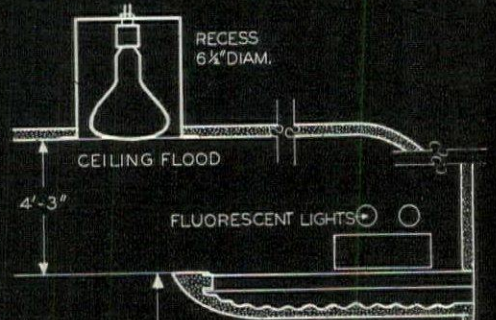
KETCHAM, GINA & SHARP, ARCHITECTS

DESIGN DATA 21.
THE ARCHITECTURAL FORUM

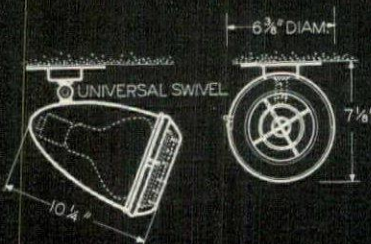


LEGEND

- ⬢ CEILING FLOOD LIGHT 300W
- ⬢ CEILING SPOT LIGHT 300W
- ⬢ FLUORESCENT LIGHT
- ⬢ SHOW WINDOW LIGHT
- ⬢ FLOOR OUTLET
- ⬢ WALL OUTLET
- ⬢ BASE PLUG
- ⬢ WATER PROOF REC.

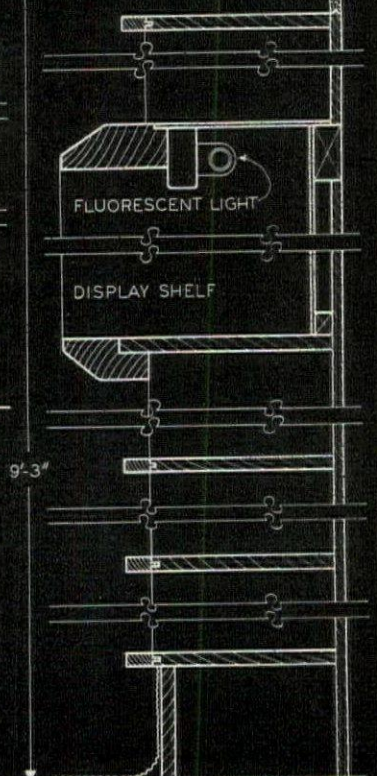


SECTION DISPLAY COUNTER



ACCENT LIGHTS

CENTURY LIGHTING INC.
CAT. NO. 373-4



SECTION A-A

JEWELRY STORE.

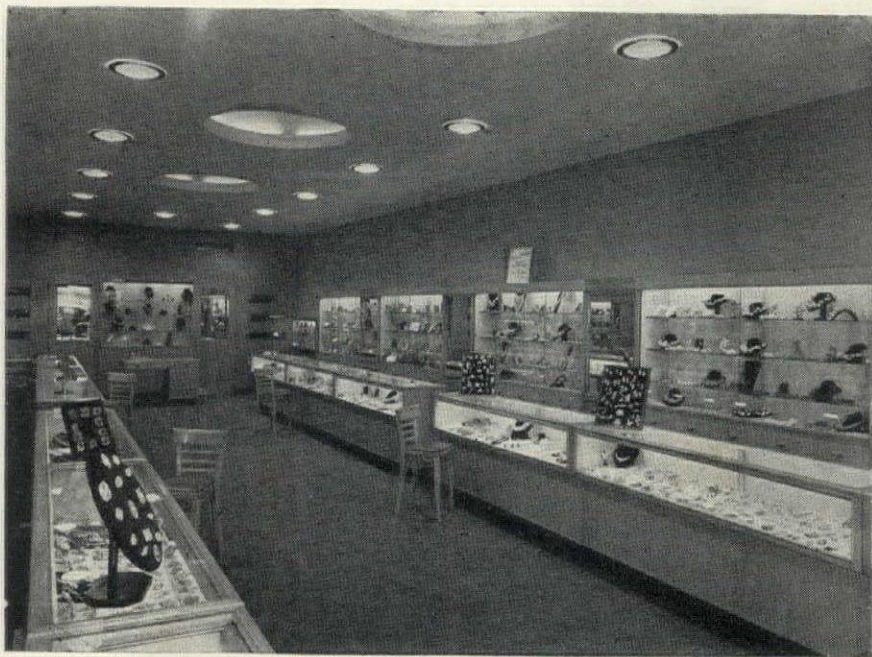
Good lighting and materials are important elements in Charles S. Telchin's solution.

RICHTER'S, NEW YORK, N. Y.

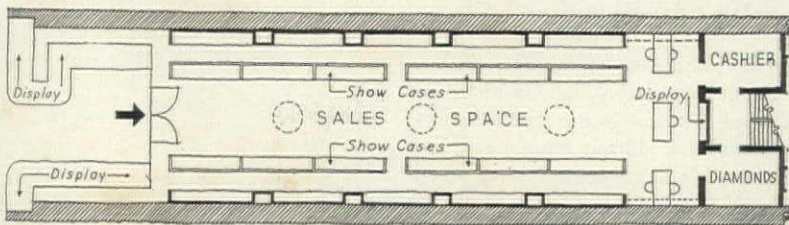
Because interest must be focused on so small an object, the display of jewels requires unusual thought and attention. Nevertheless, many tried merchandising principles hold true particularly in regard to exterior treatment where stores of all types compete, window for window. For this reason, the recessed door and bulkhead and curved glass window returns of this storefront are designed to increase the outside display space and draw the customer into the store. The gray vitreous exterior facing is complemented by a bronze sign and trim, giving a clean-cut appearance. The translucent glass panels behind the sign illuminate the second floor.

The interior, where the passerby becomes a customer, places more emphasis on the individual jewels. Lighting is of the utmost importance since its color, intensity and direction affect the appearance of any gem. The circular coves in the ceiling conceal neon tubes which give off a clear, blue light. A row of recessed reflectors on either side of the coves provides general, incandescent illumination and tends to offset the harshness of the neon blue. Tube lighting in the showcases casts a strong downlight, reflected by the jewels.

Showcases are simply designed, executed in natural primavera. Rose carpeting and walls contrast with the chalk white ceiling, completing the color scheme.

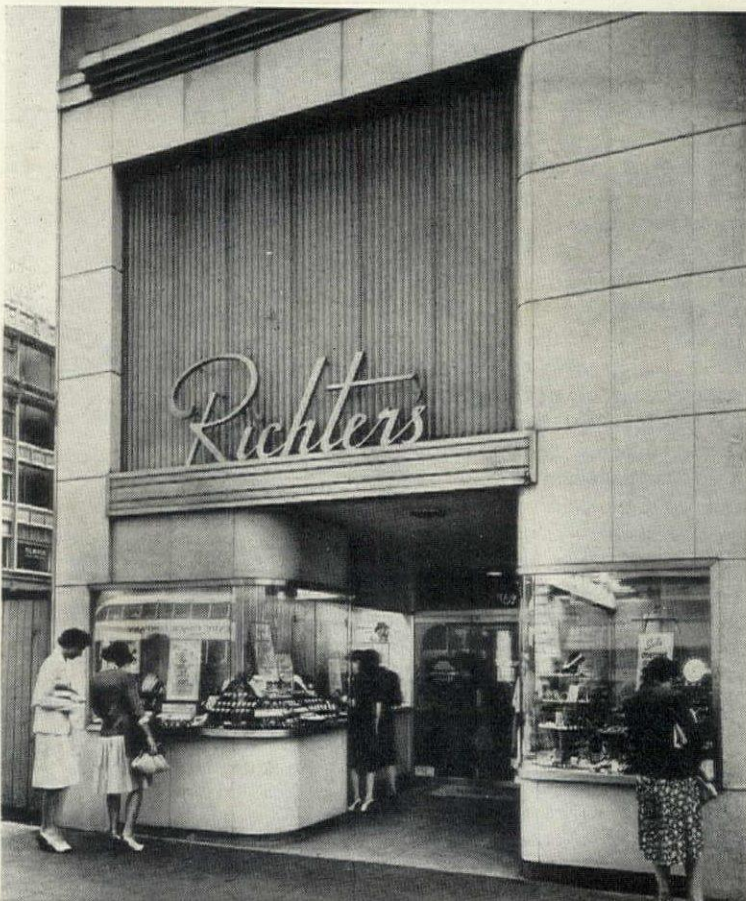


DIRECT AND DIFFUSED LIGHT SHOWS OFF JEWELS ADVANTAGEOUSLY



NEW FACADE IS FACED WITH SATIN-FINISH STRUCTURAL GLASS

STOREFRONT BEFORE REMODELING





BEN SCHLANGER has been consultant-architect for more than 50 theaters. He studied at Columbia and was graduated from the Beaux Arts Institute of Design. One of his inventions is the compound floor slope which pitches up toward the motion picture screen.

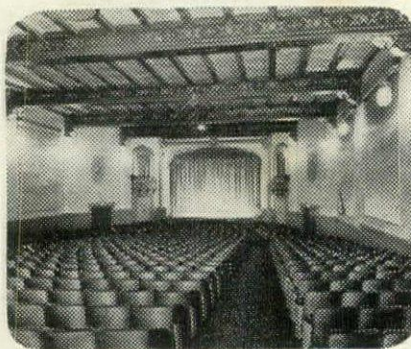
THE WHALLEY THEATRE, NEW HAVEN, CONN.

Stripped of its prewar gingerbread, this small, suburban theater is a good illustration of how easily an out-of-date building can be modernized by good design. The interior expresses the present highly laudible shift in emphasis from decoration as such to the screen, which is after all what the movie-goer wants to see. Exterior changes are compatible with this point of view. The removal of two stores which now flank the entrance makes possible a smooth front designed solely as a background for the name of the theater in large letters, an attention-getting curved marquee and recessed entrance.

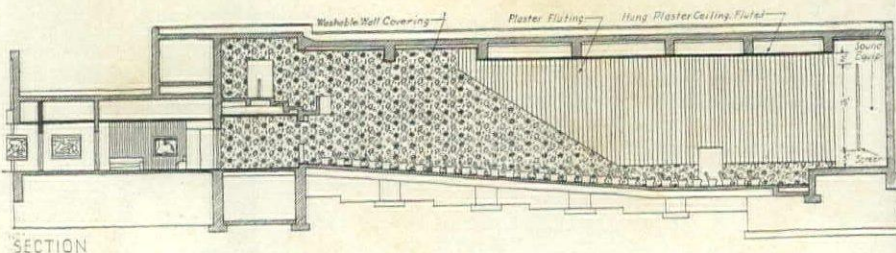
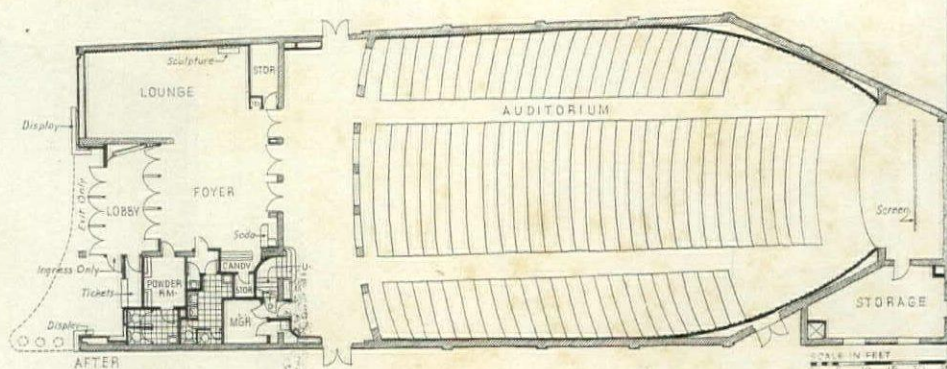
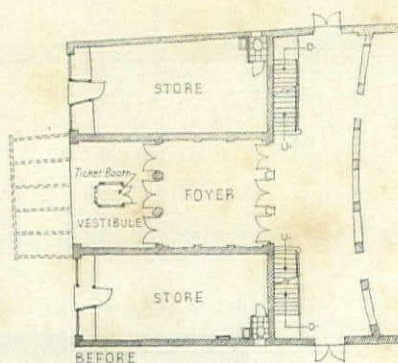
Interior modernization also hinges on elimination of the stores. The position now occupied by one store will be taken by restrooms shifted from basement to lobby for more convenient access and control. A manager's office and candy concessions, which will help make up the rent lost from the stores, are also fitted into this space. Occupying the space left by the second store, a new lounge will open up the side of the foyer, and contribute a general air of spaciousness to the entrance as a whole.

Beyond the lobby, two sets of stairs leading from the main floor to the small mezzanine will be removed and replaced by one new stairway, all that is actually needed to serve the small balcony.

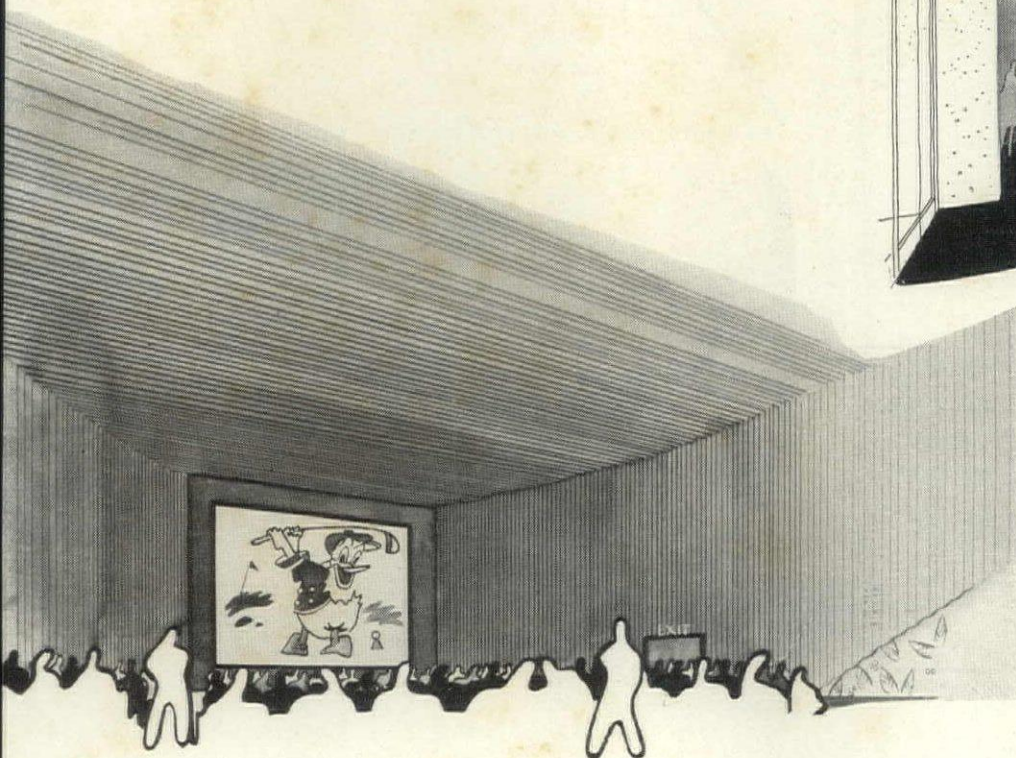
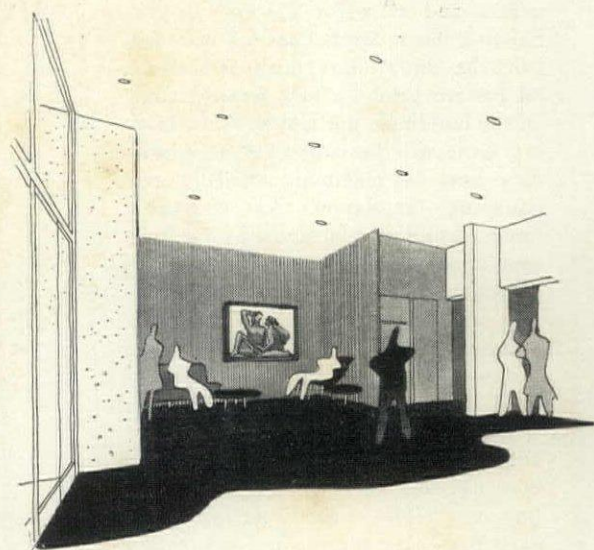
Redecoration in the auditorium proper, which seats 1,000 people, will be subordinated to the improvement of visual and acoustical conditions. Wall treatment is an important factor since the play of light and shadow on the screen must not be reflected into the eyes of the audience by the slanting side-walls. For this reason, the ceiling and approximately three quarters of the walls will be finished in corrugated plaster. The remaining wall space toward the rear of the auditorium will be transite board covered with a washable wall covering in a large floral design. Concealed flood- and spotlights on the face of the balcony will be substituted for the present lanterns, giving ample general illumination from an invisible source.



PRESENT FLAMBOYANT DESIGN GIVES WAY TO CONTROLLED SIMPLICITY



fashioned movie palace into a simple, smoothly functioning entertainment machine. Concessions replace unprofitable stores.



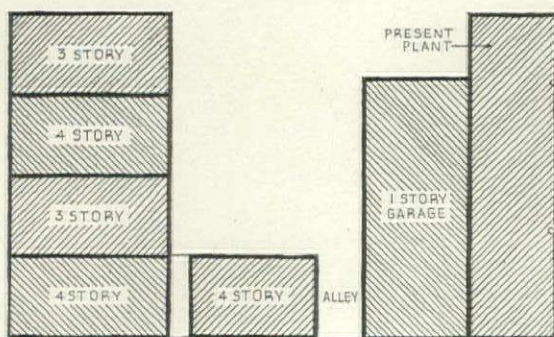


LESTER TICHY traveled abroad and attended the Beaux Arts after graduating from Columbia University. He has since worked in leading architectural and design offices and recently opened his own office as architect and industrial designer.

The remarkable transition from an out-dated industrial plant and adjacent tenements (below), to the handsome working-living development (right), is a result of the owner's conviction that employe amenities pay off in profit and labor. The remodeled building group will provide unusual conveniences for workers in the form of small apartments, recreational facilities, modern stores and restaurants in addition to larger workrooms. Recognized as a factor of increasing importance, employe convenience is more cheaply provided in big factories located on low priced land away from metropolitan centers than on highly valued urban plots. For this reason the scheme provides two sources of revenue intended to offset operating costs—a restaurant and rental apartments.

The factory building will be enlarged by taking in the adjacent one-story garage and alley for the full height. Existing floor levels, carried through from the old building, create a horizontal pattern behind a new glazed facade on the building's north side. The building units will be connected at second floor level for maximum efficiency and minimum circulation. An employe's lunch room is supplemented by a restaurant at street level, open to both employes and the public. Since the restaurant will serve breakfast and dinner, it is assumed that its patronage will be drawn from the surrounding neighborhood and from the apartments above.

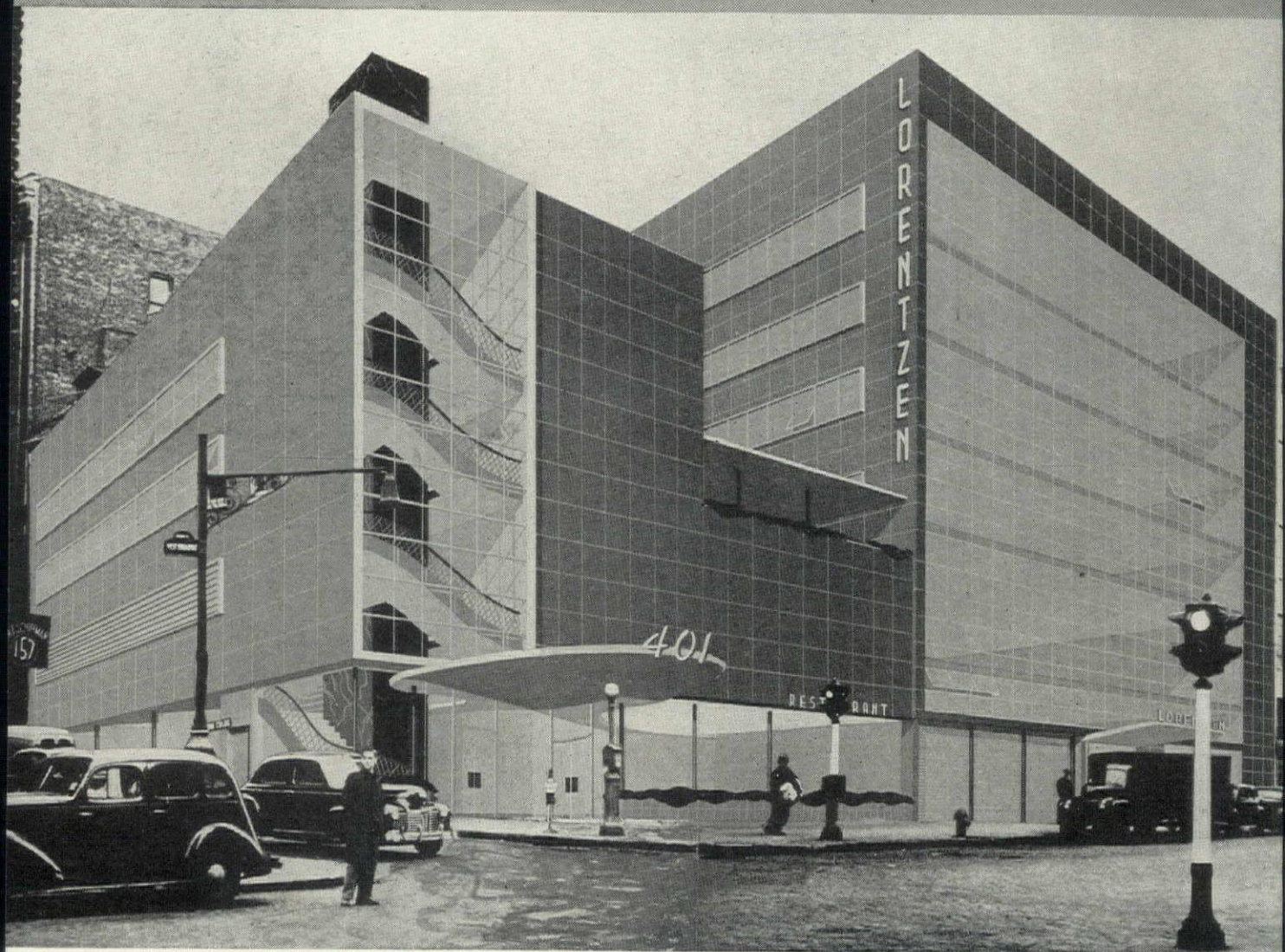
The employe's lunch room, lockers and washrooms are grouped on a single floor immediately accessible to the factory workrooms. The apartments, an executive's restaurant and recreation area occupy the two upper floors.



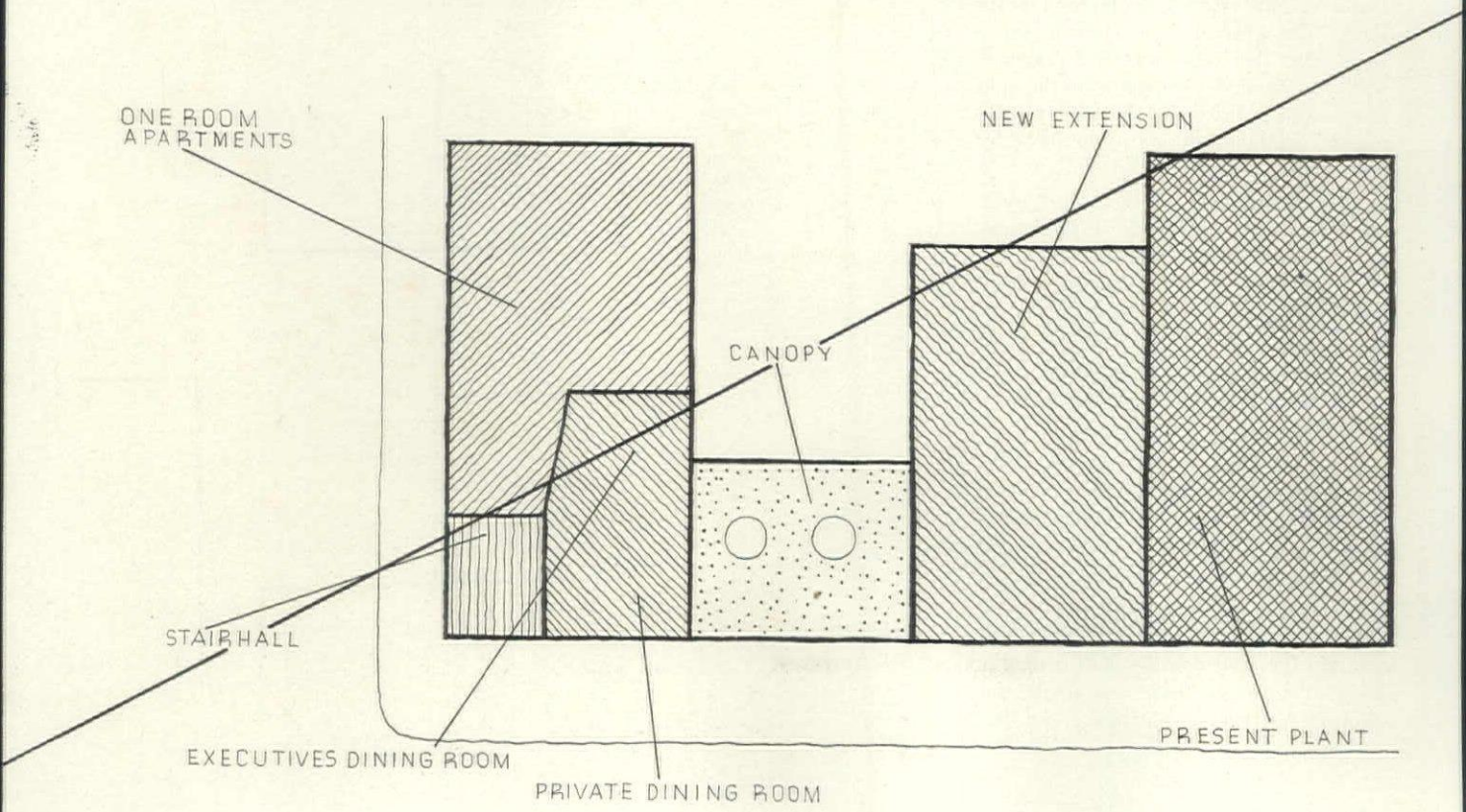
EXISTING BUILDINGS ARE DILAPIDATED AND UNPROFITABLE

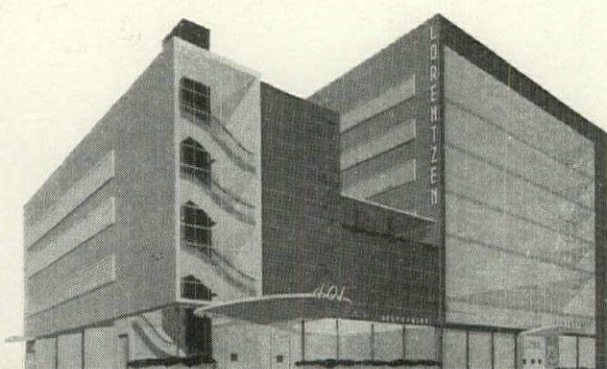
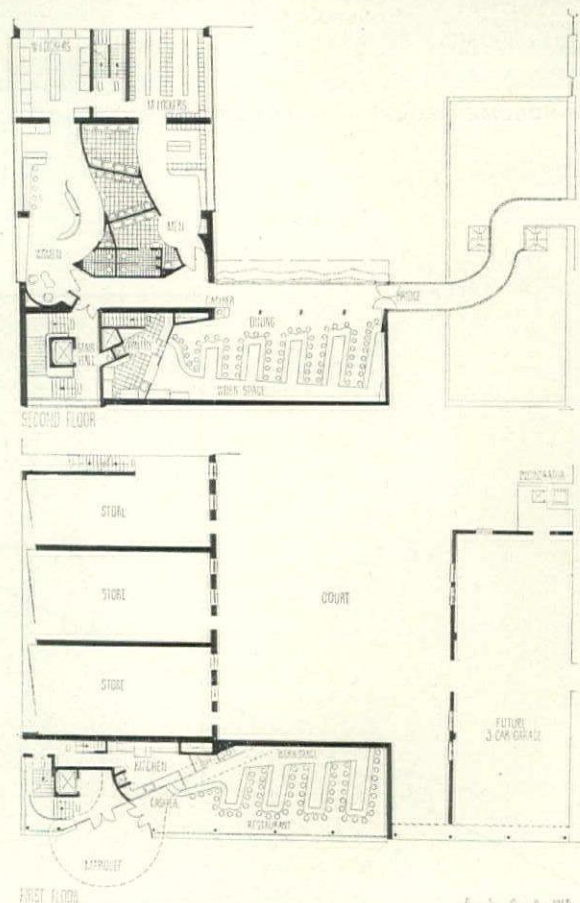
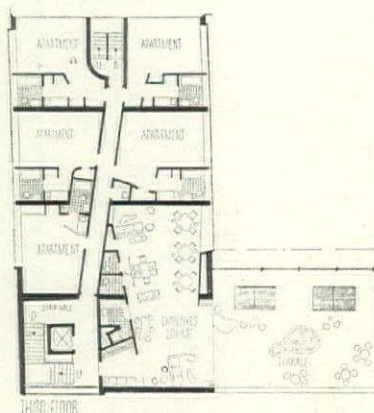
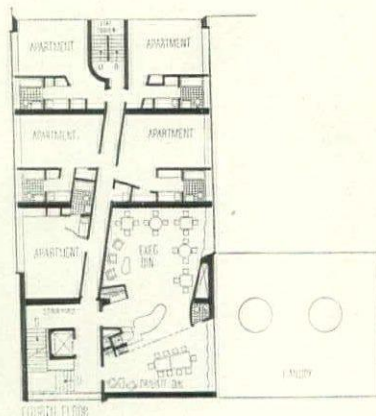


a more expressive exterior suggests the incorporation of adjoining properties into a unified setting for in-city manufacturing.



HANDSOME GROUPING HOUSES AND FEEDS WORKERS, IS ALSO THE NUCLEUS FOR AN IMPROVED NEIGHBORHOOD



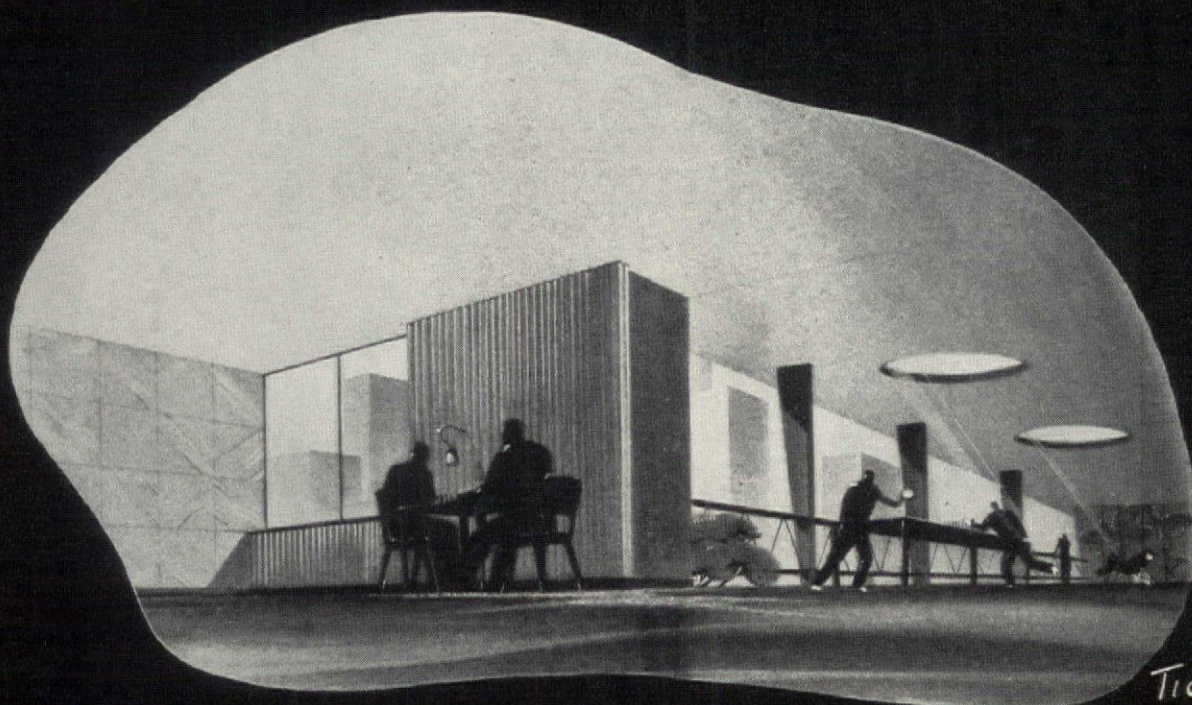


The plan of the corner unit makes excellent provision for circulation, and employs angled partitions and free forms to solve awkward planning problems. The ground floor kitchen, separated from the restaurant by a diagonal wall, has its service entrance on the side street, and is linked to the pantry serving the employee's dining room above by connecting stairs.

The second floor, designed to serve employee needs during working hours, has its washrooms concentrated in the center of the building leaving ample light and space for dressing rooms on either side. Lockers occupy the solid wall at the end of the building. The lunch room is illuminated by a large window overlooking the court.

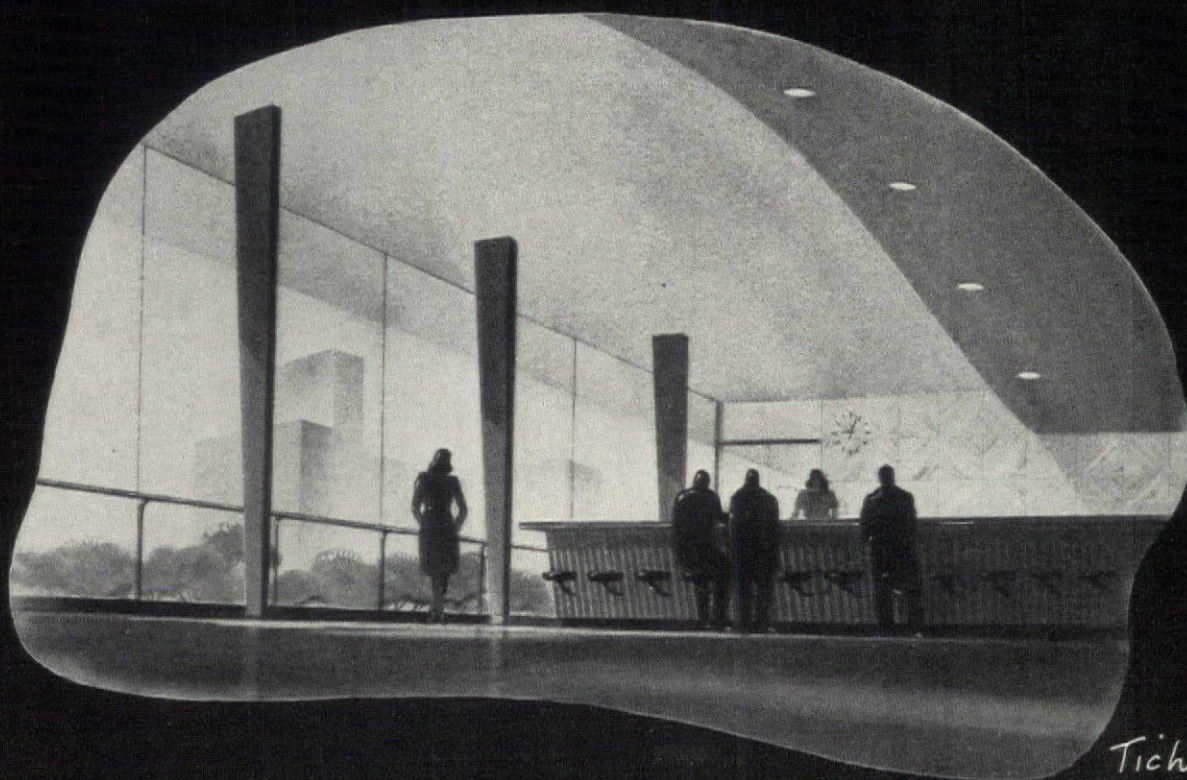
The employee's lounge on the third floor opens on a large canopied terrace. On the fourth floor, an executive dining room can be divided into two separate rooms by means of a folding wall. To make the size of these major rooms adequate the architect used a slanted hall and laid the apartments out in irregular shapes. Although these are small, the slanting walls help alleviate a cell-like appearance.

aurant and even rental apartments attached to the plant. Cross connections facilitate use of space in adjoining structures.



Tichy, 44

RECREATION TERRACE, THIRD FLOOR



Tichy, 44

EMPLOYEE CAFETERIA, SECOND FLOOR



ROBERT CARSON AND EARL H. LUNDIN are both employed by Rockefeller Center, Inc. Mr. Lundin (right), a graduate of the University of Michigan, is managing architect. Mr. Carson graduated from the University of Pennsylvania, worked in the office of Raymond Hood.

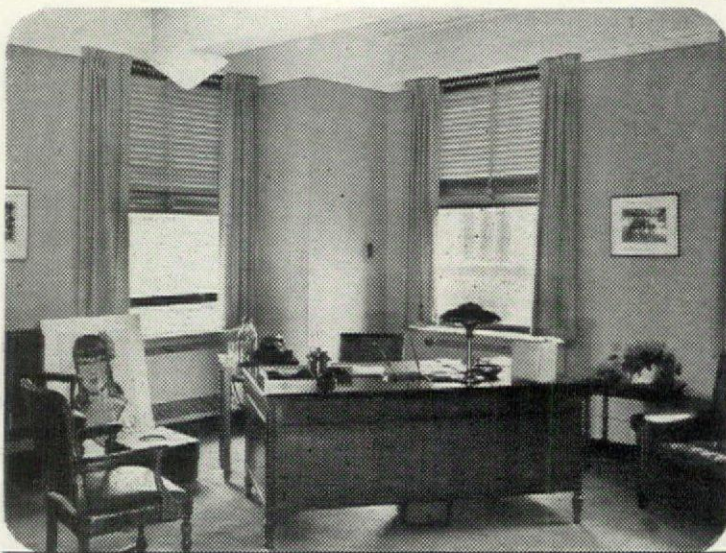
The requirements for an advertising executive's office are numerous and varied. In addition to more routine functions, it must serve as a conference room and a presentation room for layouts and sound recordings. A curved desk, the focal point of the scheme, provides a large, clean working space. By a simple quarter turn of the chair, its occupant is placed at the head of a good sized conference table. Only a few shallow drawers are provided since all correspondence and supplies are kept in an outer office, occupied by the secretary. The washroom off the entry contains a shower and clothes cabinets.

For visual presentations, four fabric covered panels have been placed above the sofa. The two central panels are double, swing out and back against the wall creating interchangeable sets of four surfaces each. Maps and a movie screen unroll from a recessed space in the hung ceiling. The furred space next to the window contains a radio-phonograph, record storage and loudspeaker. Several occasional chairs can be grouped about the sofa for less formal discussions.

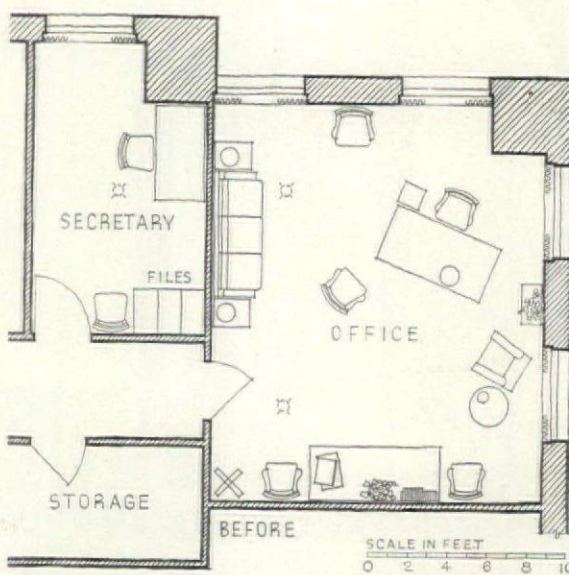
Both direct and indirect lighting are used. Direct light, controlled by lenses flush with the ceiling, illuminates the desk; indirect fluorescent lighting recessed in a cove along the south wall gives a pleasant general illumination.

To relieve the severity of a strictly professional interior, the architects have introduced their client's favorite hobby—a collection of cactus and desert plants. These are reflected in a full length mirror between the south windows when the wide venetian blind is raised. The asymmetrical desk and free curves of the planting box contrast agreeably with the angularity of a typical office space.

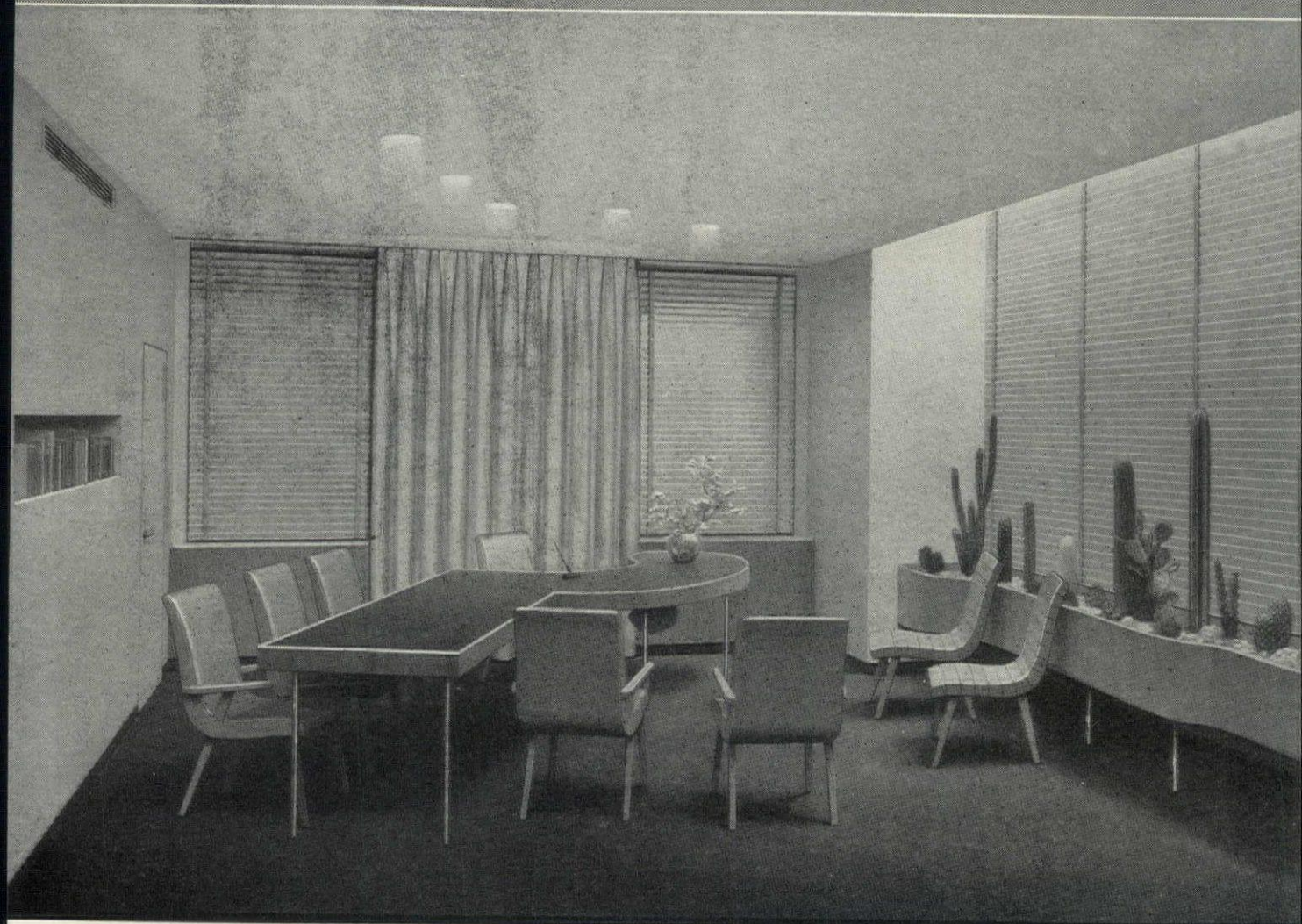
Richard A. Althoff



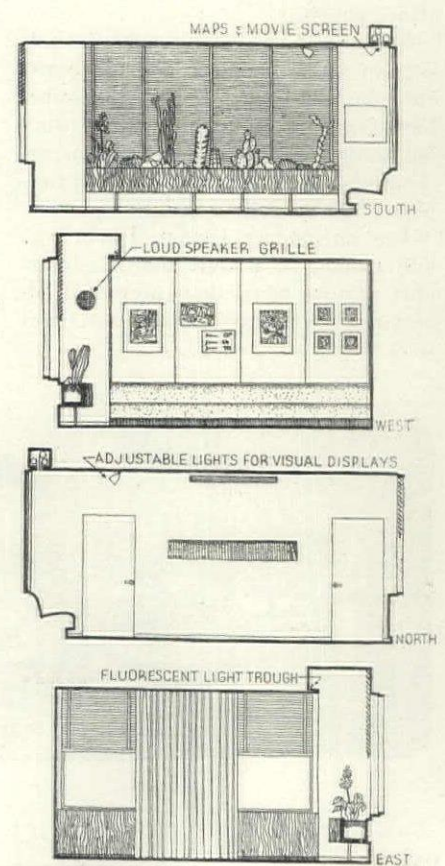
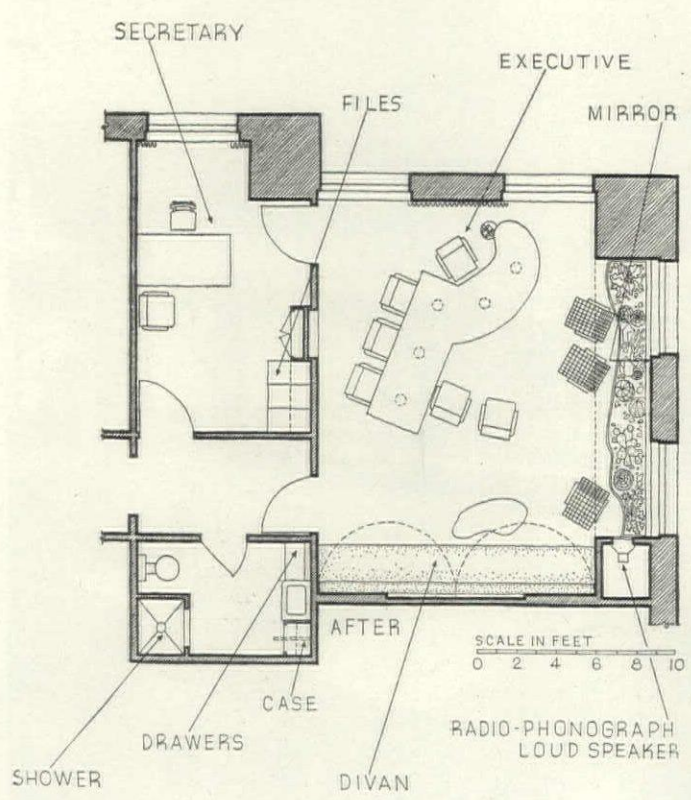
PHONOGRAPH ON FLOOR AND SKETCH LEANING AGAINST WALL INDICATE LAYOUT



iture and lighting create a private office, conference room and cactus-fancier's retreat for the head of an advertising agency.



DEQUACY OF OLD LAYOUT. REMODELED, THE OFFICE NOW OFFERS COMPLETE FACILITIES TO FIT TENANT'S NEEDS

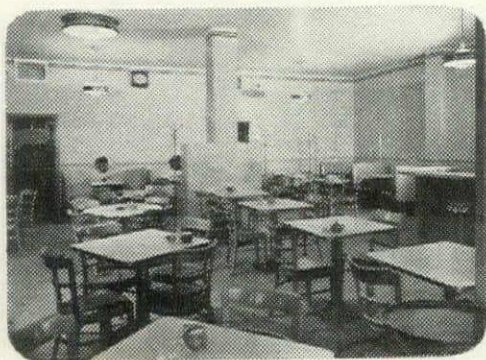


Photos: P. A. Dearborn

KIRKPATRICK'S RESTAURANT SEATTLE, WASH.

Sensible arrangement rather than a lavish display is the remodeling theme of this cafeteria in a busy shopping district. By adding a double row of center booths and a low zigzag partition between tables, a formerly large and disorganized space is broken into compatible groupings. Existing booths and tables are retained in combination with a few necessary new ones. Carpeting and acoustical ceiling treatment complete the re-designing job and effectively control noise.

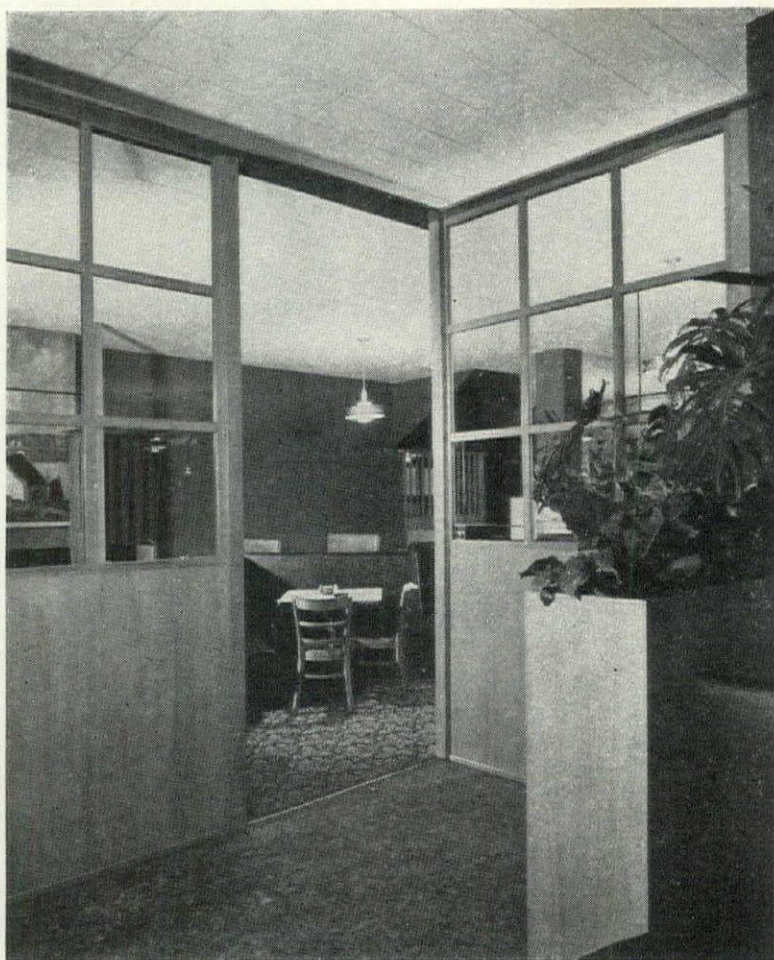
The general atmosphere of order and



privacy is enhanced by a small entrance hall for waiting customers. A particularly well handled part of the cafeteria design, it is constructed of simple bleached mahogany partitions inset with glazed panels.

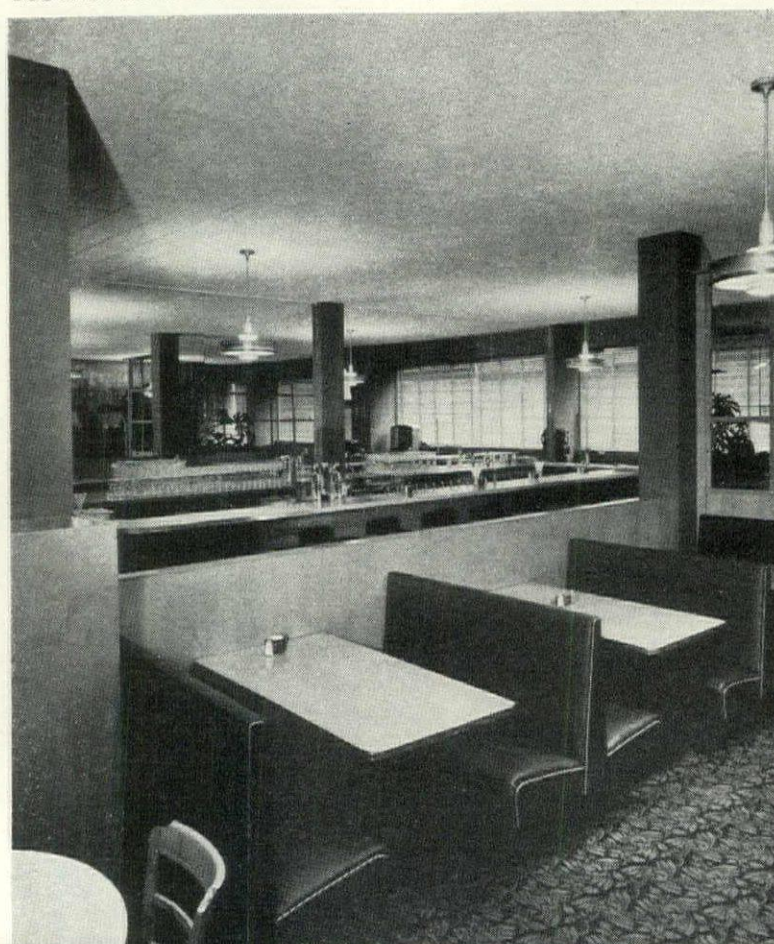
Of the original color scheme including tan walls, tan floor and tan seats, only the old booths remain the same. New furniture is upholstered in wine red, walls are veridian green with mural decoration by Eustace P. Ziegler. Carpeting is wine with a goldleaf pattern.

The satisfactory kitchen layout was left unchanged. Budget and time limits plus wartime restrictions prevented improving the plumbing and electrical work.



GLAZED VESTIBULE ADDS FILLIP TO OTHERWISE BARE ENTRANCE

BOOTHS PROVIDE COMPACT SEATING, MIRRORS LEND PERSPECTIVE



lor" look of a self-service lunchroom into an atmosphere of quiet and privacy. Booths replace isolated tables.

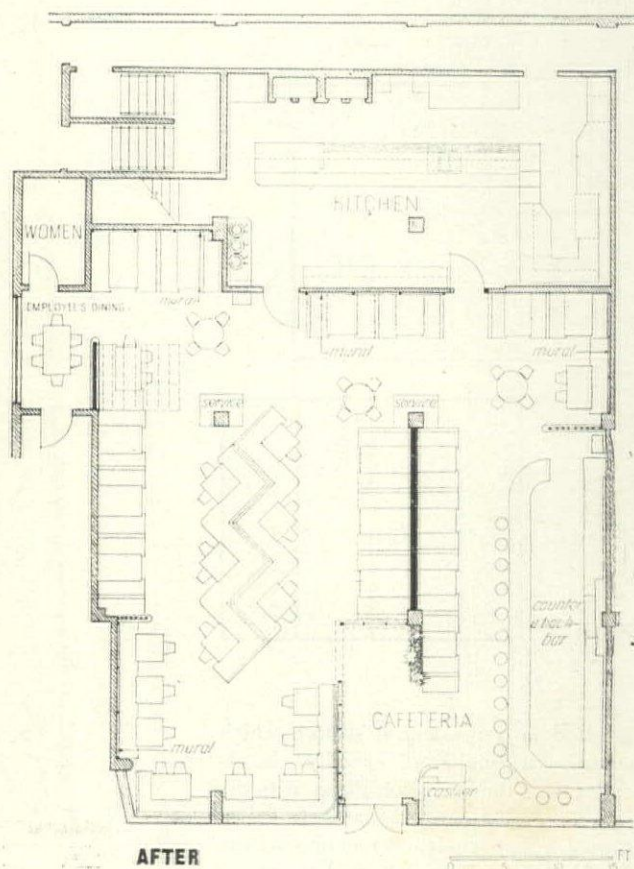
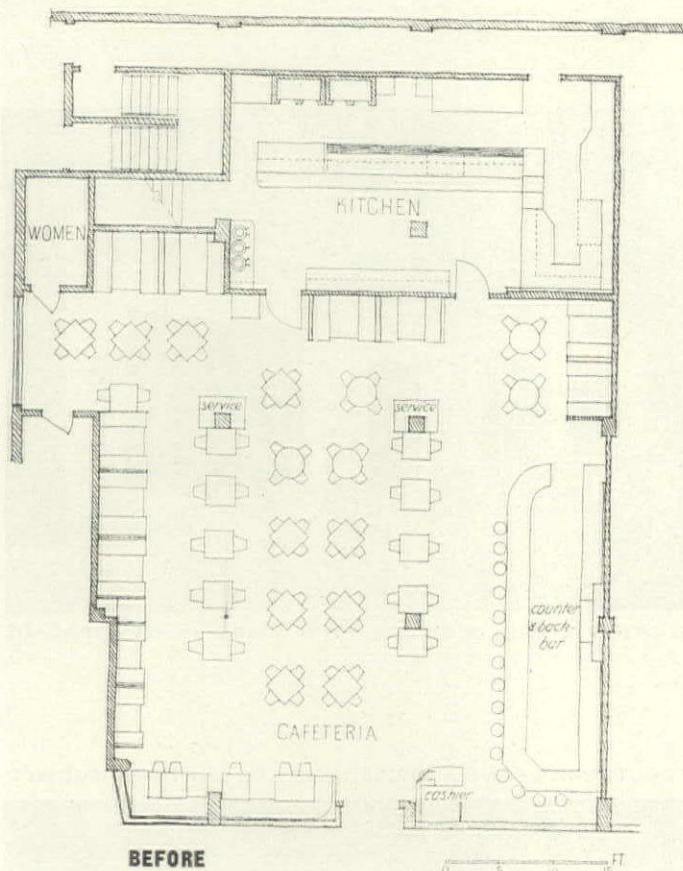


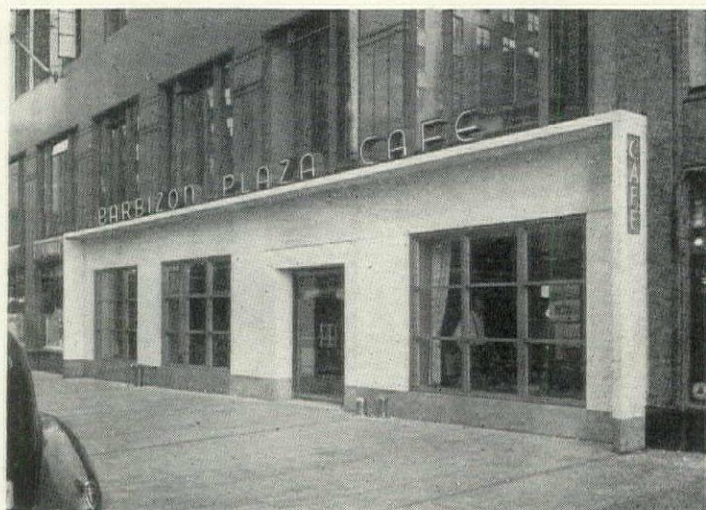
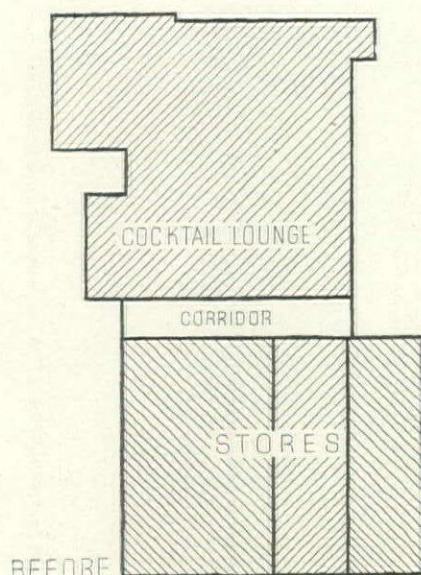
TABLE ARRANGEMENT ADDS FUNCTIONAL DESIGN ELEMENT. MURALS ARE WELL ABOVE AVERAGE LUNCHROOM ART



BAR AND CAFE.

Important competitive and advertising values were realized by Sydney Goldstone's scheme

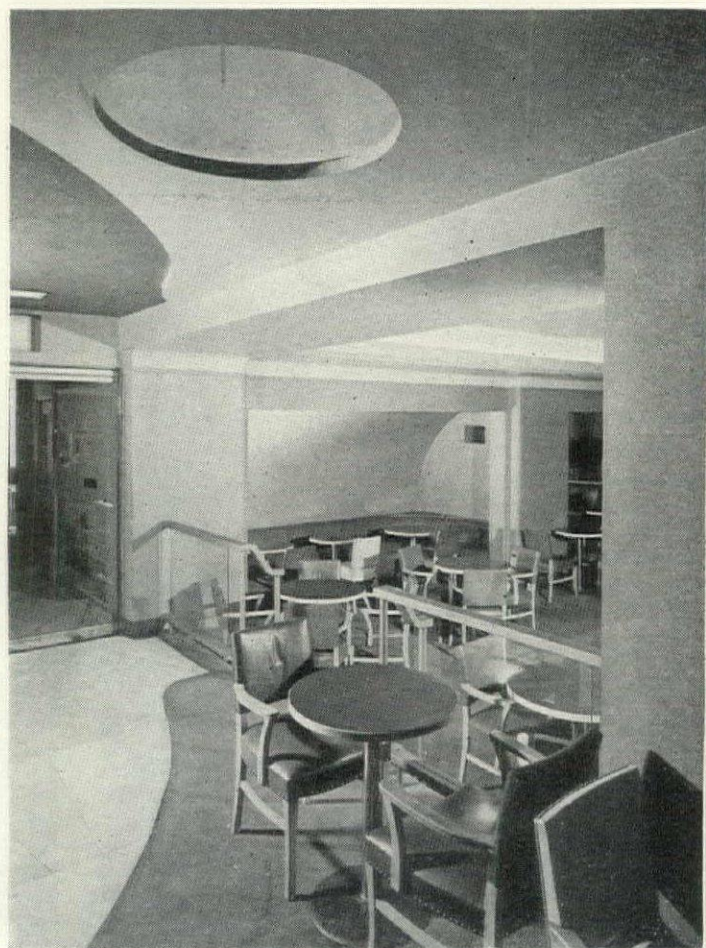
BARBIZON PLAZA CAFE, NEW YORK, N. Y.



EXISTING STORE OPENINGS WERE USED IN NEW FACADE

Located in a residential section which contains a number of excellent hotels and cafes, the Barbizon-Plaza with its single, interior cocktail lounge failed to attract a satisfactory percentage of the passing trade. To remedy this, the architect converted a basement corridor and three shops of moderate rental value into an additional room, opening the cafe to the street. The remodeling was simple, involving little more than the elimination of partitions, but interior details such as the furred and coved ceiling have a definite architectural quality. A new, circular bar was placed at the front of the cafe where it is easily seen from the street. The windows are sliding panels in fire-proofed wood frames which can be opened wide when the air conditioning system is not in use. Of further assistance in bringing the festive light from under its bushel is a skillfully applied color scheme of red, white and blue.

STRUCTURAL BEAMS AND COLUMNS ARE LEFT UNDISGUISED

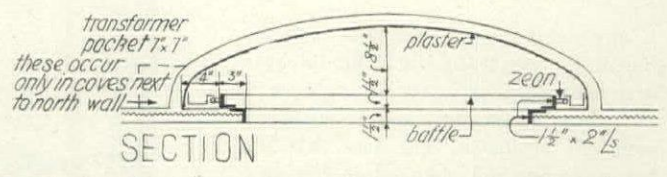
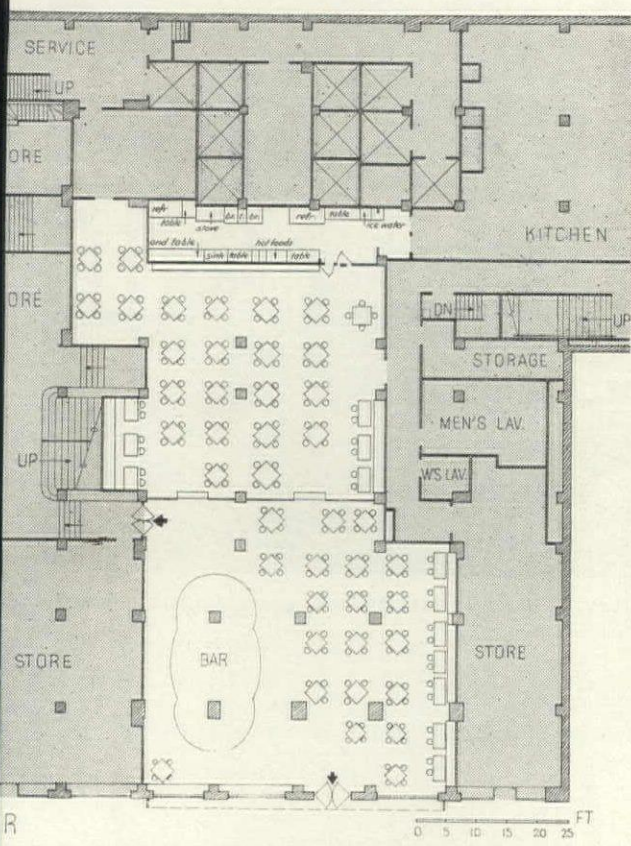


FINISHES AND EQUIPMENT:

FLOOR COVERINGS: Linoleum — Armstrong Cork Co. Carpet—Mohawk Carpet Co. **FURNISHINGS:** Table tops—Formica Insulation Co. **HARDWARE:** Oscar C. Rixson Co., and Russell & Erwin Mfg. Co. **PAINTS:** Sherwin Williams Co. **ELECTRICAL INSTALLATION:** Zeon Lighting—Federal Electric Co., Inc. **AIR CONDITIONING:** Owens, Illinois. Anemostats—Minneapolis - Honeywell Regulator Co. **SPECIAL EQUIPMENT:** Bar — Nathan Strauss-Duparquet, Inc.

GENERAL CONTRACTOR:
GOTHAM CONSTRUCTION CO.

ding and opening the interior cafe of a large hotel. Three converted stores provide the newly acquired street frontage.



DINING AREA RECEIVES LIGHT FROM CIRCULAR COVES

E SWEEP OF WHITE LINOLEUM AROUND BAR FOLLOWS THE CONTOUR OF A GAILY COLORED CEILING RECESS ABOVE



GENERAL AND EXECUTIVE OFFICES. Air conditioning, better lighting and separation

JOHN MORRELL & CO.,
SIOUX FALLS, S. D.

If any proof were needed that remodeling of the structural shell should have first place in modernization, a glance at the offices shown on these pages offers sufficient evidence. The fact that the furniture was not changed in the general office focuses attention on the structural alterations, finishes and mechanical equipment. With the introduction of a partition the space was simplified and reduced in scale. The partition created a billing room in which the noisier machines are located, away from the general office. Fluorescent troffers were introduced to take the place of incandescent fixtures. The intensity of the new installation was stepped up sufficiently to eliminate the need for desk lamps; moreover, this method of lighting cleared the ceiling of hanging fixtures and gave a smooth effect to the interior.

Executive offices show the same ceiling treatment, but the walls are finished in richer materials. The manager's office was redone in riftsawn oak, the sales manager's office in a lively combination of Weldtex and rawhide. The elimination of picture rails and the use of roomhigh curtains also assist in creating a modern effect.

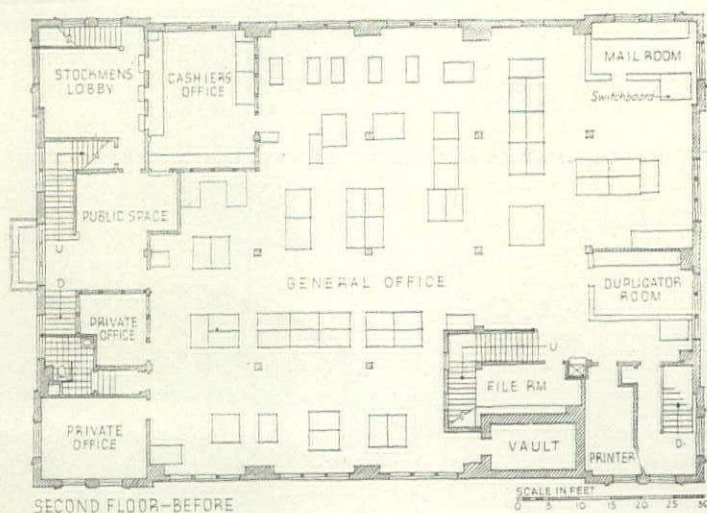
Photos: Everett Kroeger



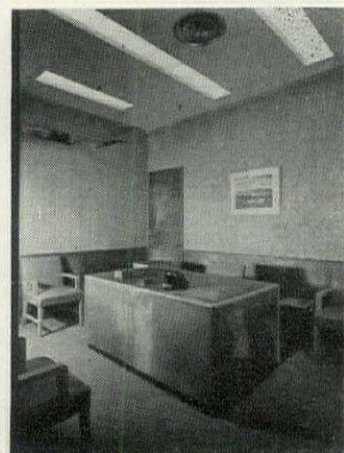
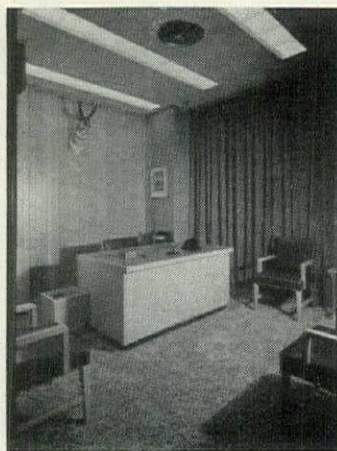
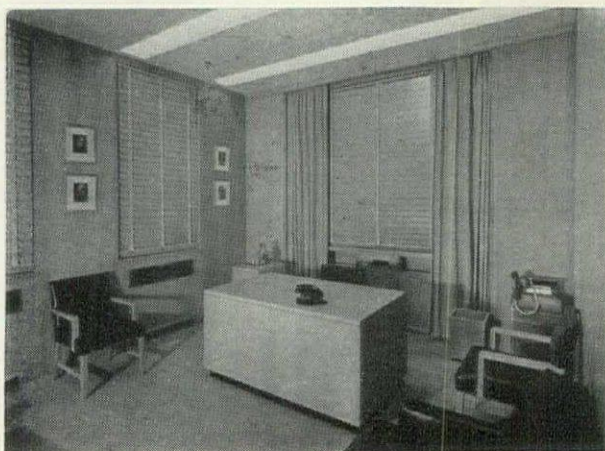
BEFORE VIEW, MANAGER'S OFFICE



BEFORE VIEW OF UNDIVIDED GENERAL OFFICE LACKS ORDER, SPACE

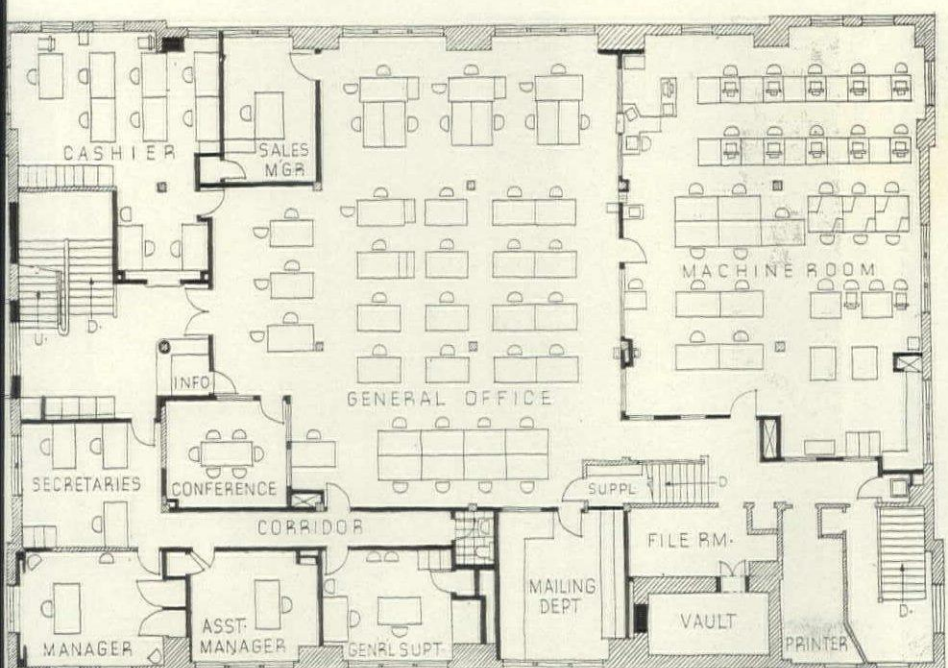


PRIVATE OFFICES FOR MANAGER, ASSISTANT AND SALES MANAGERS HAVE PANELLED WALLS, RECESSED LIGHTING





TH PARTITION INSTALLED AND COLUMN REMOVED, THE GENERAL OFFICE NOW HAS BETTER SCALE AND CIRCULATION



SECOND FLOOR—AFTER

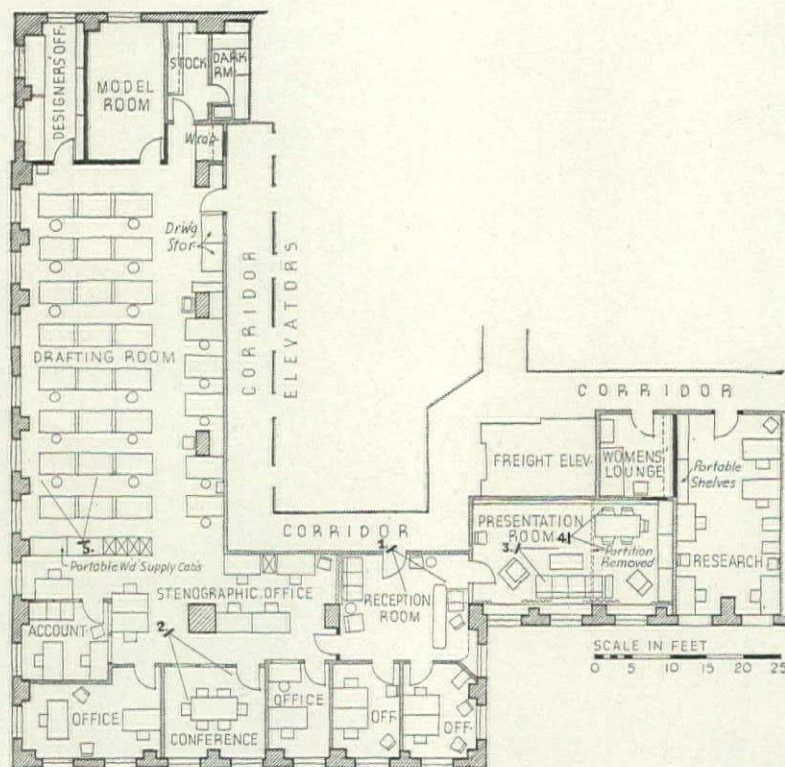
SCALE IN FEET
0 5 10 15 20 25 30

FINISHES AND EQUIPMENT: INTERIOR PARTITIONS — wallboard with tarred joints, canvased, National Gypsum Co. INSULATION — Johns-Manville and National Gypsum Co. WINDOWS: Glass-Libbey-Owens-Ford Glass Co. WALL COVERINGS — rubber, Goodyear Tire & Rubber Co.; linoleum wainscot, Armstrong Cork Co. FURNISHINGS: Desks—Davidsons Ltd. DOORS — Farley & Loetscher Co. and Kawneer Co. HARDWARE—P. & F. Corbin. PAINTS — Pittsburgh Plate Glass Co. ELECTRICAL WIRING—General Electric Co. PLUMBING FIXTURES — Crane Co. Grilles — Tuttle & Bailey. Regulators — Johnson Service Co. GENERAL CONTRACTOR — SIOUX FALLS CONSTRUCTION CO.

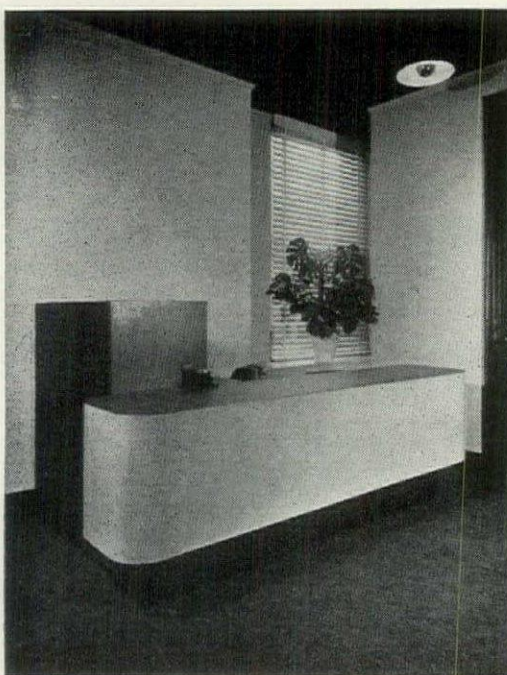
VAN DOREN, NOWLAND & SCHLADERMUNDT, NEW YORK, N. Y.

Believing that a product will sell only when it is based on the needs, requirements and tastes of the customer, this firm tested the reactions of its staff to a new office plan before it was executed. They found that the flow of the office must center in the drafting room and that the preference of its occupants was for extreme simplicity. Few changes were made in the plan of the original offices. The main purpose was to make work easier and facilitate the frequent brief conferences necessary between design specialists and administrators.

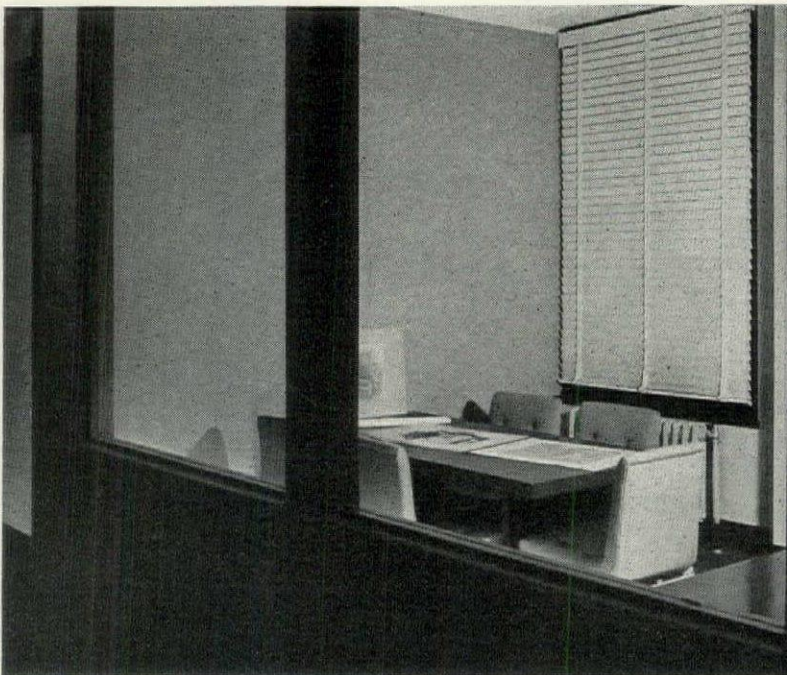
Reception and presentation rooms were located in adjoining offices and linked to the drafting room by a corridor by-passing the stenographic offices which serve all departments. Other conference rooms and offices were arranged along the same central corridor. The slower process of research was removed from the main flow altogether. At the further end of the drafting office, storage and model-making space was provided, together with a small dark room.



RECEPTION DESK IS TOPPED BY LINOLEUM



AUXILIARY CONFERENCE ROOM IS USED FOR STAFF DISCUSSIONS

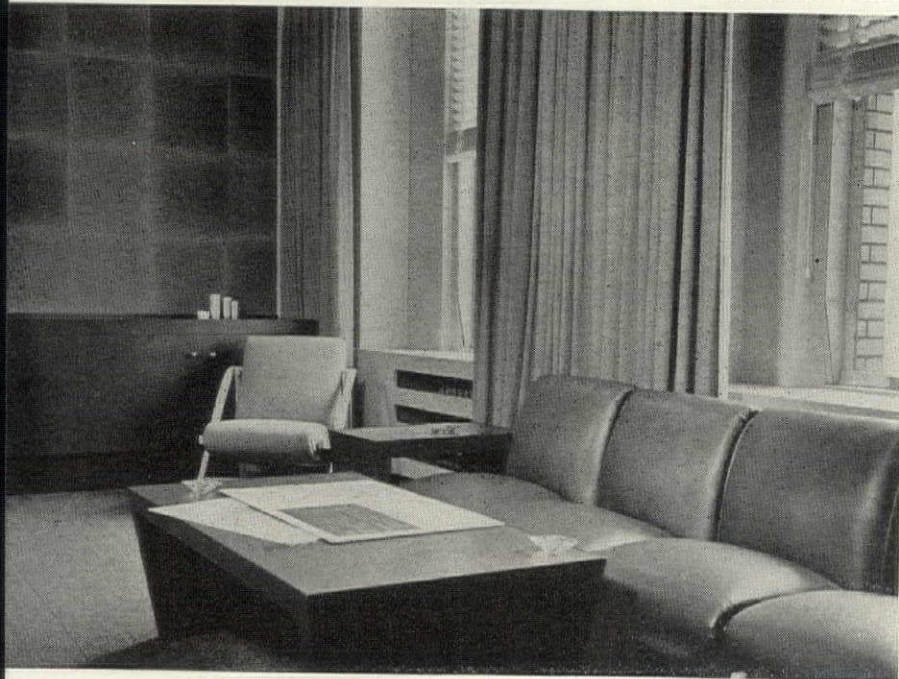


gn technique to themselves, proving that maximum consumer acceptance before execution results in a good-looking product.



CONFERENCE ROOM UTILIZES CORK WALLS FOR PIN-UPS AND A DESK-HIGH TABLE FOR PRESENTATION OF MODELS

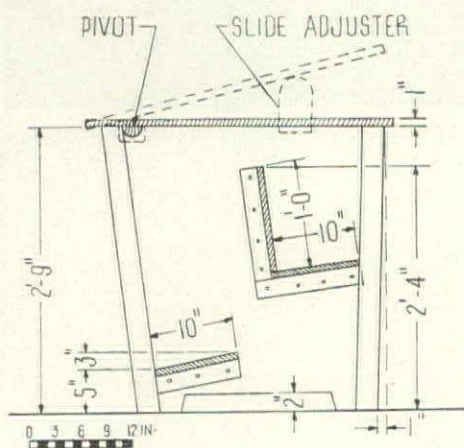
DESIGN MATERIAL IS EXAMINED ON LOW PRESENTATION ROOM TABLE



FINISHES AND EQUIPMENT: FLOOR COVERINGS — Hotel & Theater Carpet Co. WALL COVERINGS: Corrugated structural glass — Mississippi Glass Co. FURNISHINGS — Valley Upholstery Corp. PAINTS — George Debevoise. ELECTRICAL FIXTURES — Kurt Versen. GENERAL CONTRACTOR: ROGER & McCAY.



DRAFTING ROOM IS HUB OF OFFICE ACTIVITIES. PALE-TONED WALLS DISTRIBUTE NORTH LIGHT EVENLY



STANDARDIZED, ADJUSTABLE DRAFTING TABLE



Furniture and equipment show the results of intensive research in this field. Posture studies were made for the design of drafting tables and conference chairs. The drafting tables have sliding blocks to adapt them to the height requirements of each individual, while the conference chairs are said to reduce bodily fatigue during long sessions.

In the drafting room each pair of desks is separated by a reference table. Suspension telephone booths were sound-proofed with Acoustone blocks to ensure designers of privacy and audibility in conversations with clients.

ADMINISTRATIVE OFFICES.

G. McStay Jackson, Inc. replan and refinish an executive suite.

GEORGE S. MAY,
CHICAGO, ILL.

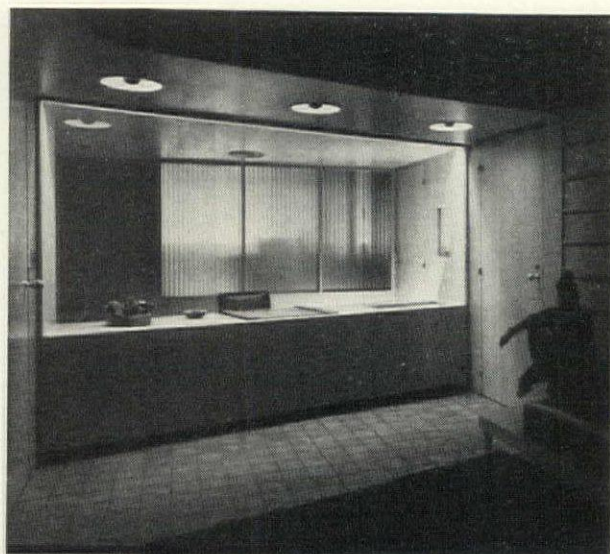
With a minimum of structural alteration and a generous use of custom-built furniture, the designers of these Chicago offices have improved inter-office communication and created a series of handsome new interiors. A former general office was divided into a reception room and corridor, the latter forming the means of connection among all departments. A tiled floor continues the passageway across the waiting room, which has access to a public corridor. A careful masking of the structural elements has added interest and variety to the interior without causing unnecessary projections or fussiness. Overhead beams are screened by lighting troffers and acoustical ceilings deaden sound.

Inside the reception hall (1) the desk forms a continuous surface across the end of the room. The working space is partially separated by clear plate glass panels from the waiting area and by a Louvrex glass partition from an adjoining office. Flush drawers and sliding panels conceal the receptionist's equipment.

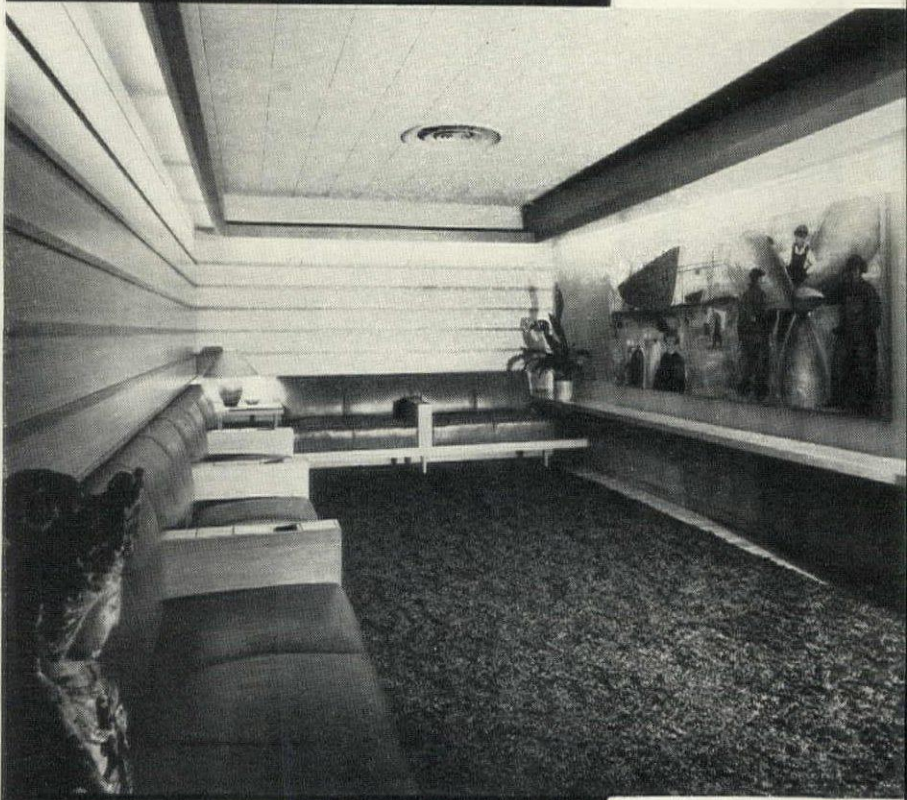
The lighting intensities are well handled. Circular receptacles for incandescent fixtures are recessed in a false ceiling which extends on both sides of the plate glass panels and also contains a fluorescent trough to light the desk. Other lighting consists of a troffer, which is a continuation of the false ceiling soffit around the perimeter of the waiting room. This casts the light downward, using the walls as a reflecting surface.

Visitors' accommodations (2) consist of red leather upholstered banquettes along two sides of the room separated by white oak buffers containing ash trays. The walls are of horizontal rift-sawn oak, with battens of the same material. Oak is also used vertically behind the mural, which depicts a wartime shipyard scene. The whole of the interior can be seen from the receptionist's chair (3) which is upholstered in green leather. The carpet is a rich dark brown.

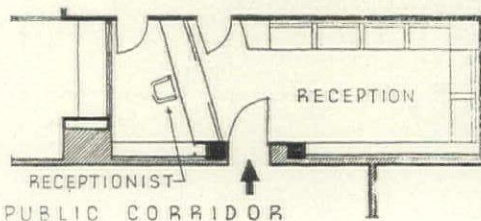
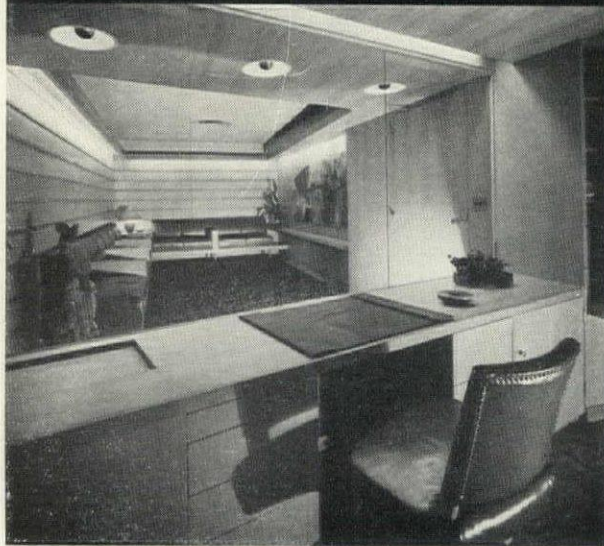
1.



2.

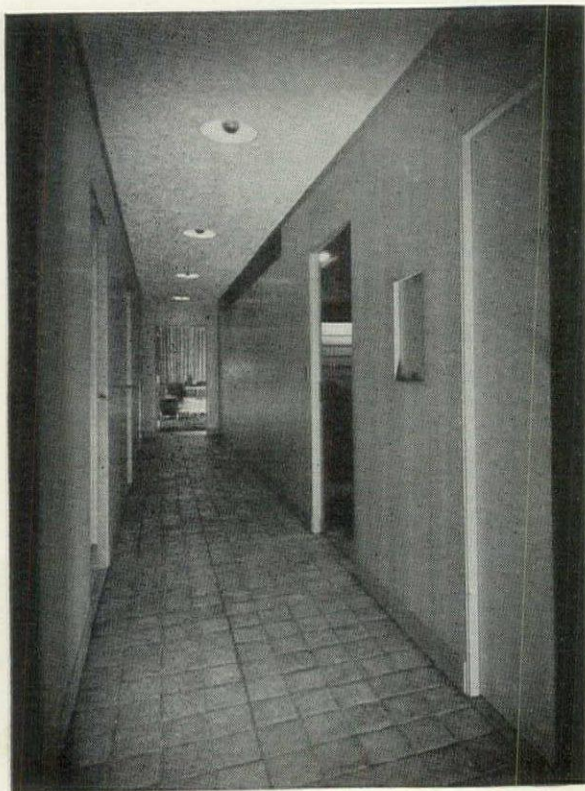


3.



ADMINISTRATIVE OFFICES.

A change-over from the stereotyped to the informal is apparent in the comforta

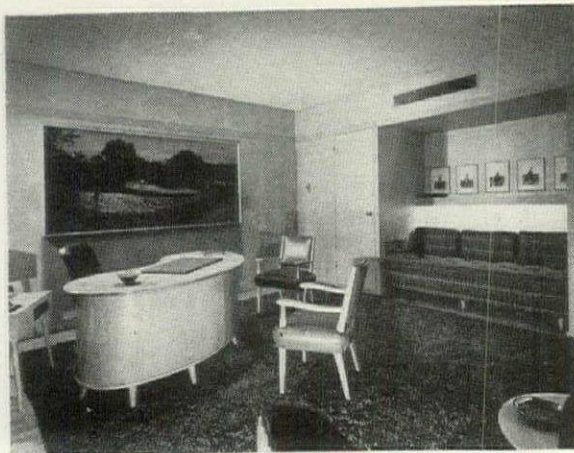


CORRIDOR TERMINATES AT PRESIDENT'S OFFICE

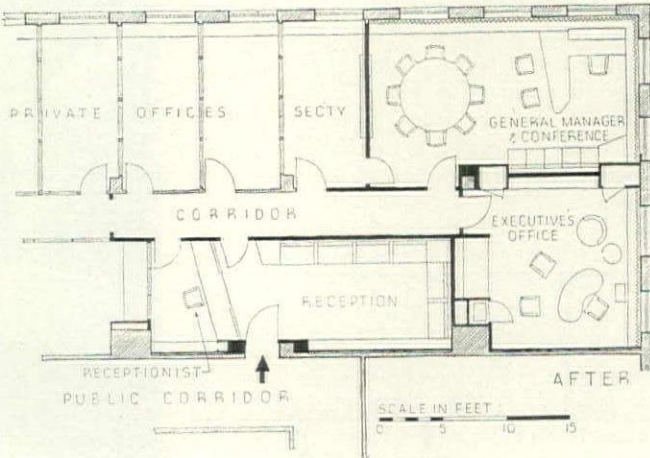
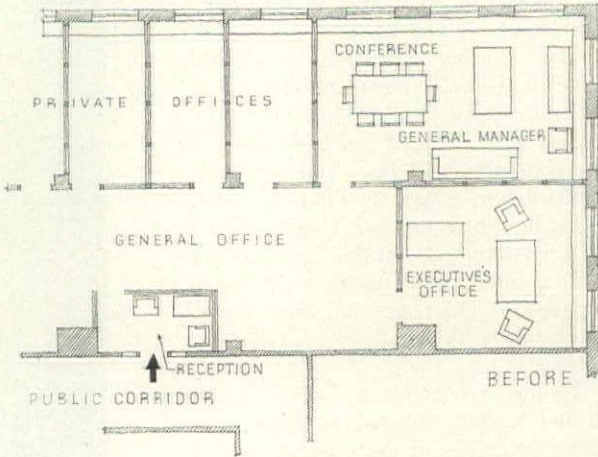
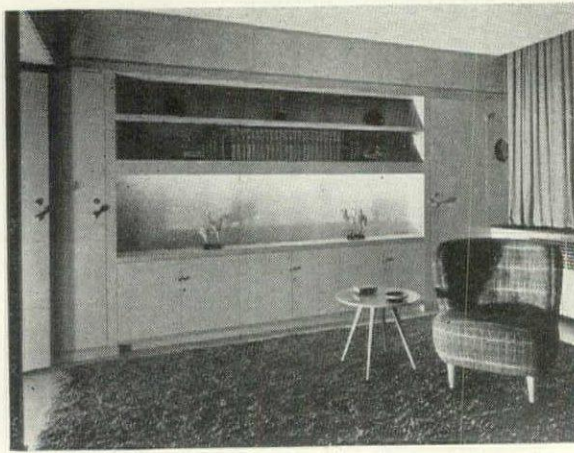


LIQUOR CABINET PUNCTUATES WHITE OAK WALL

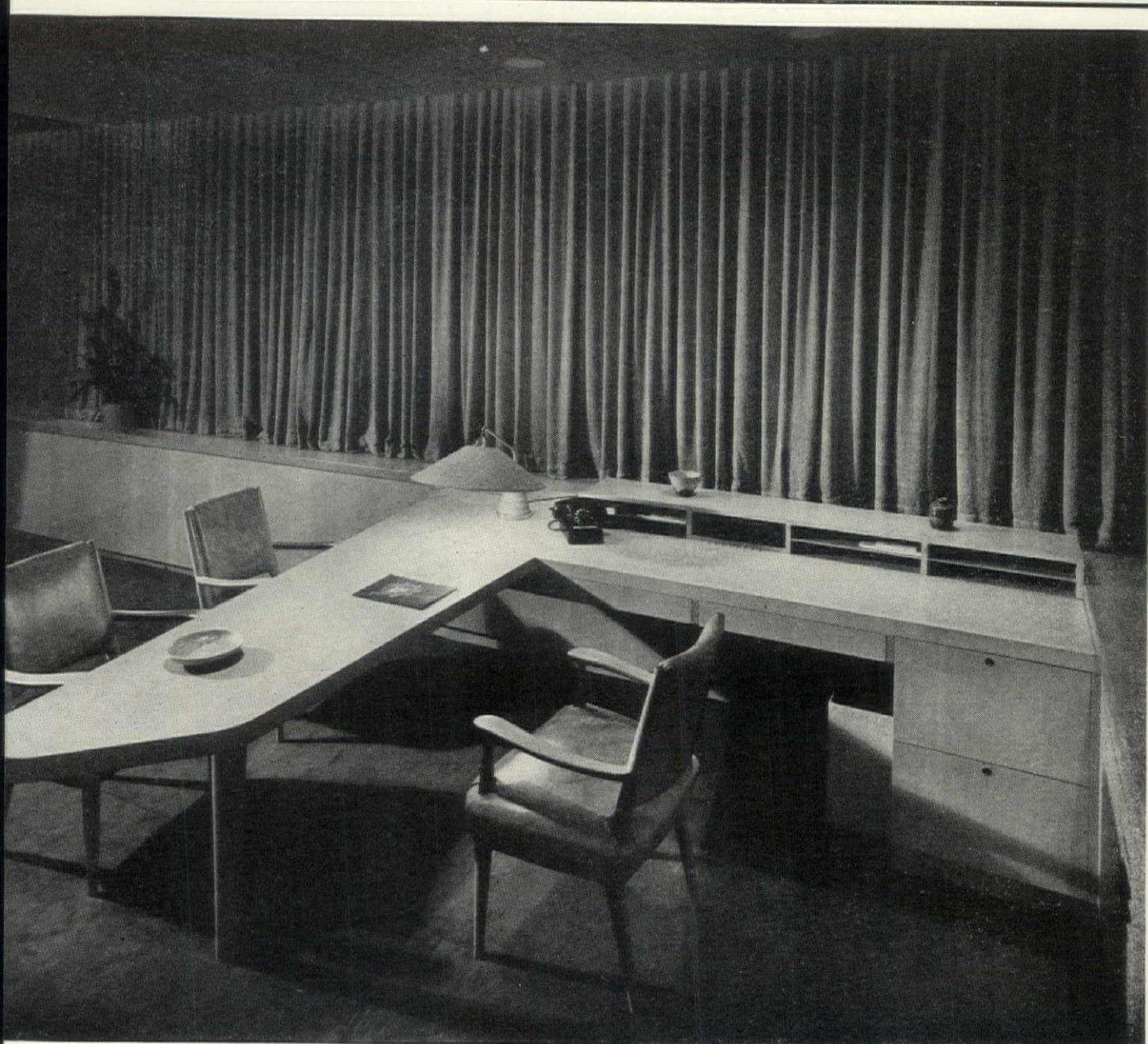
PRESIDENT'S ROOM HAS KIDNEY-SHAPED DESK



NEW STORAGE WALL CONCEALS REFRIGERATOR



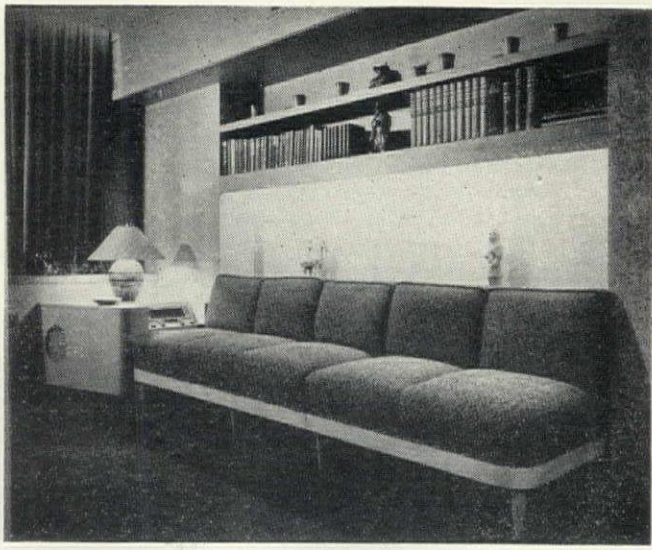
ishings for executives and callers, keyed by decorative upholstery and cabinet work, mural panels and refreshment bar.



A COMBINATION DESK AND PROJECTING DISCUSSION TABLE DIVIDES SPACE IN THE GENERAL MANAGER'S OFFICE

MANAGER'S BUILT-IN SETTEE AND RADIO ADD LUSH NOTE

Offices of the president and general manager remain structurally unchanged, except for remodeling of the dividing wall to contain a bar and bookcases. Much has been done, however, to add warmth, color and convenience to both. In the executive's office a closet conceals lavatory, linen and accessory compartments. A small table near the president's desk houses an inter-office communication system, telephone, radio control, and switch for the recessed ceiling lights. In the manager's office continuous curtains and low, built-in furniture emphasize the horizontal lines of the long room. The conference table is lighted by a combination spot and indirect fixture, maintaining the high standard of illumination achieved throughout the job. All the furniture was designed and built by G. McStay Jackson, Inc.



FACTORY CAFETERIA.

Converted from an old-fashioned loft floor, this restaurant provides a com

INTERNATIONAL DETROLA CORP., DETROIT, MICH.

Undaunted by a disproportionate space cluttered with structural columns, this architect succeeded in producing a factory cafeteria that belies the original limitations. Outstanding are the ingenious handling of circulation and scale and the successful masking of the offending columns. The requirements were, in a sense, paradoxical. While there had to be facilities for feeding 1,400 workers, a restful, isolated atmosphere was also desired; both convenience and intimacy were necessary. In addition, the plan had to provide rooms for executive luncheons since the building is located four miles from the city.

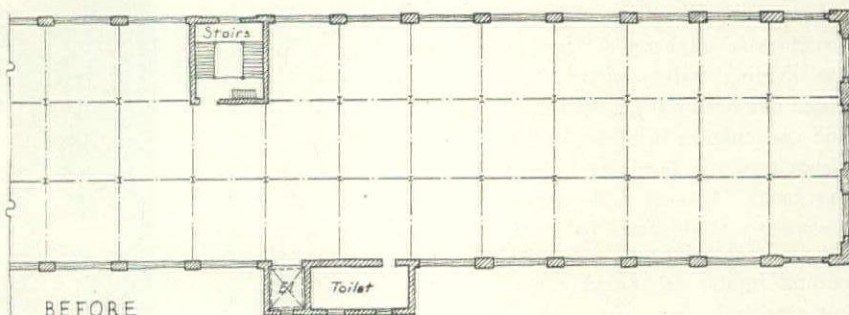
The factory, constructed in 1917, had an interior characteristic of the period: an oversized rectangle dotted with rows of supporting columns. In the solution, the diagonal placement of the kitchen and the use of free shapes throughout proved successful in overcoming the most unsightly structural features and provided excellent circulation facilities. An ample entrance lobby connects directly with both the public and the private dining areas. The layout of the main dining room dictates that ingress shall be at the left, egress at the right.

The steel columns, encased in round, elliptical and rectangular boxes, became subdued elements of the decorative scheme. Foreshortening of the building's length was aided by placing a circular stage-storage unit, used for addresses at employe gatherings, between the entrance and the main dining area and by furring the space between windows at an angle, giving a louvered effect along the outside wall.

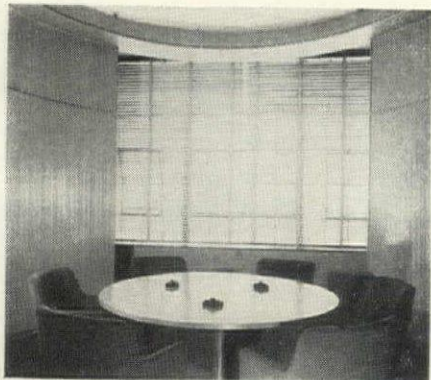
Conforming to a strict budget, only simple materials were used; natural woods for the wall surfaces, asphalt tile for the floors. Red, grey, green and beige are the predominant colors. As a whole, the decorative scheme succeeds in imparting a fresh, progressive spirit in restful surroundings.



EXISTING STRUCTURAL COLUMNS WERE MINIMIZED IN NEW DESIGN



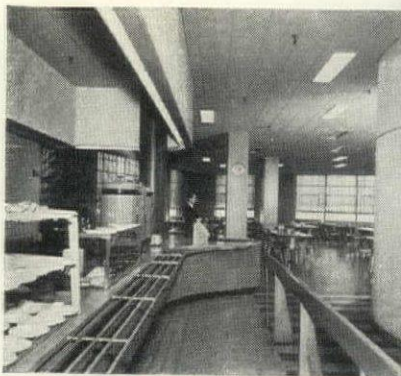
sition from the strain of precision assembly to a relaxing recreational atmosphere. Alexander H. Girard, architect.



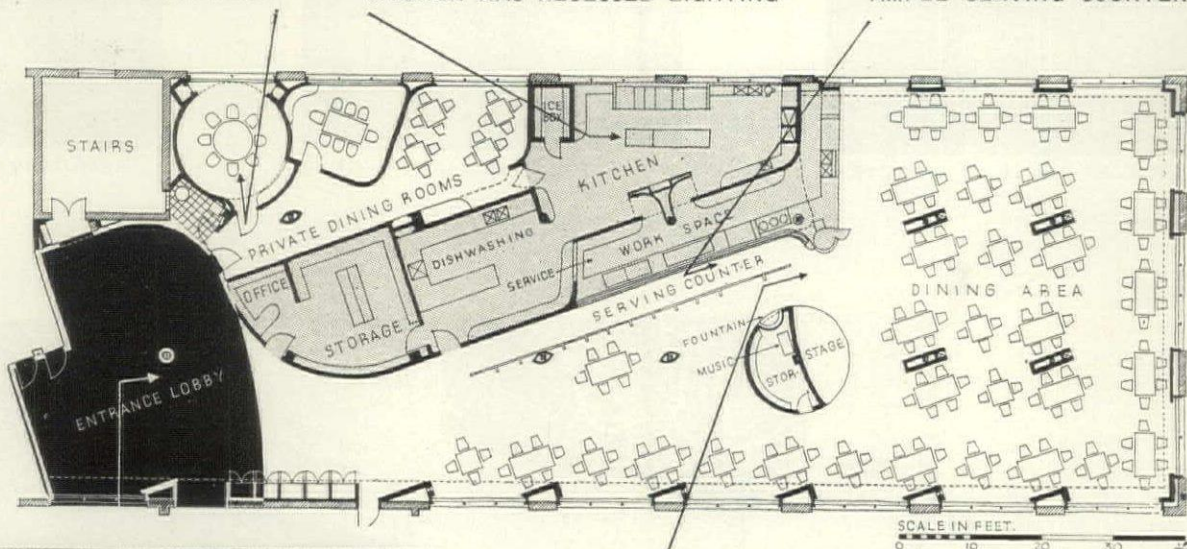
EXECUTIVE'S PRIVATE DINING ROOM



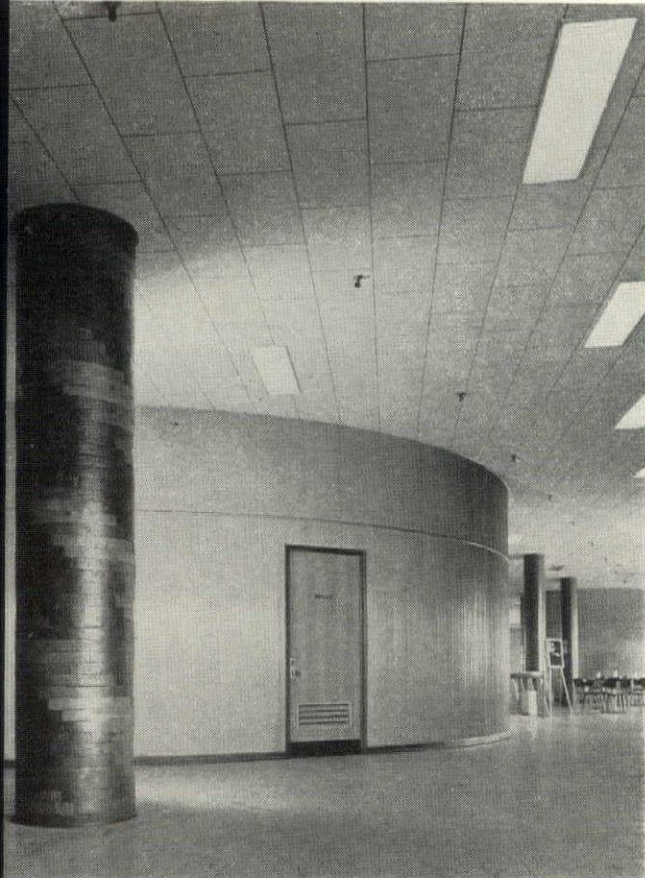
KITCHEN HAS RECESSED LIGHTING



AMPLE SERVING COUNTER

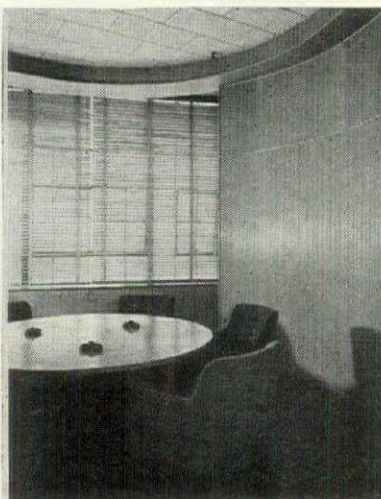


PARTITIONS BREAK UP DINING AREA

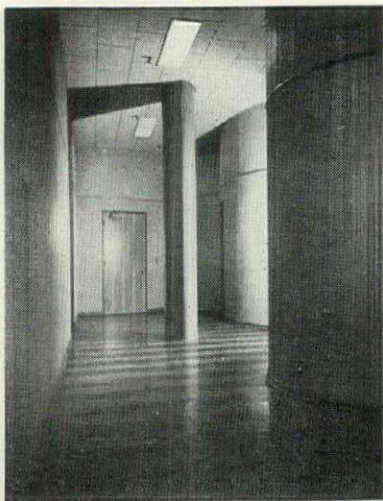


ALL, BENT PLYWOOD STRIPS COVER COLUMNS IN LOBBY

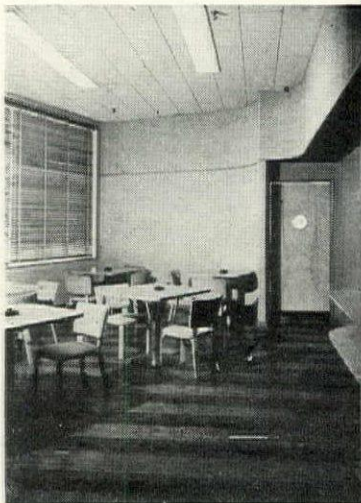




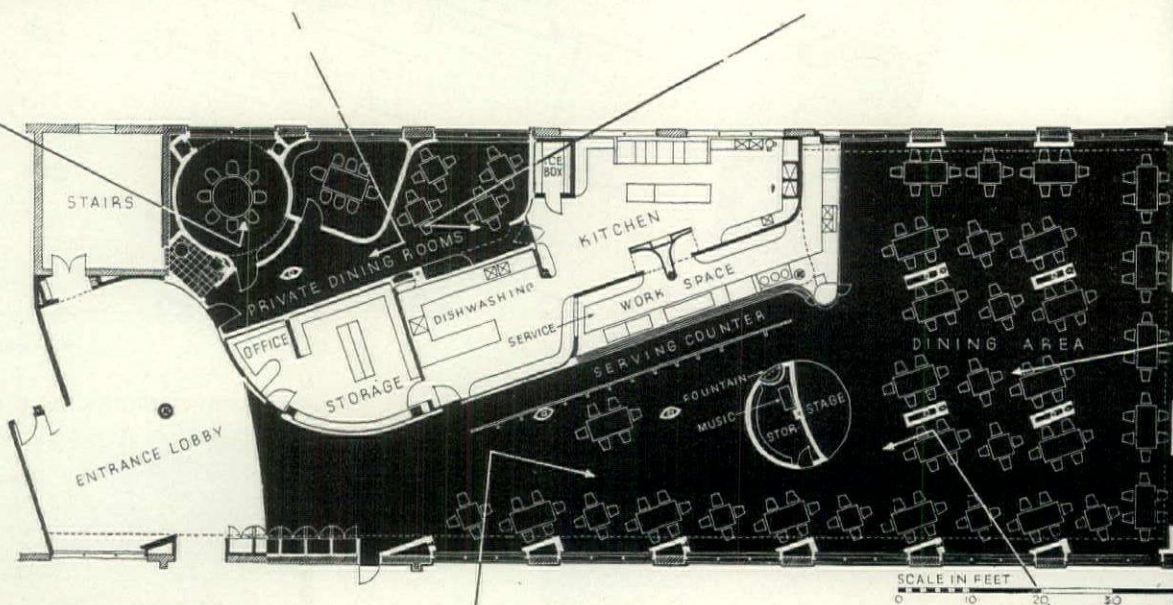
CIRCULAR WALL IS WELDTEX



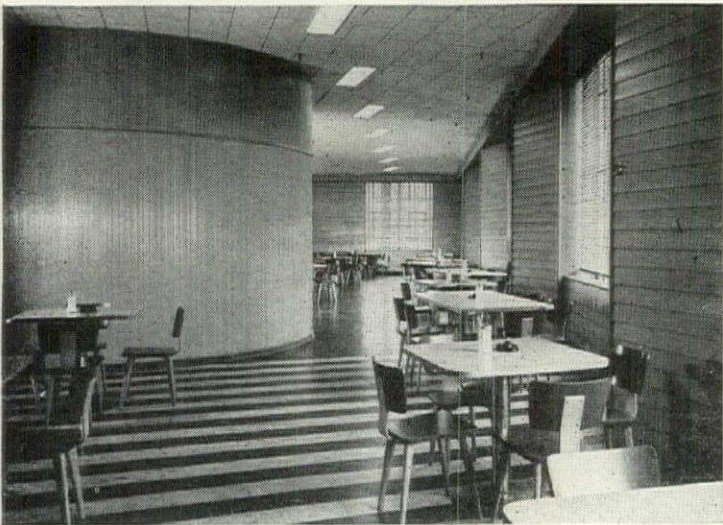
HALL HAS PLEASANT WIDTH



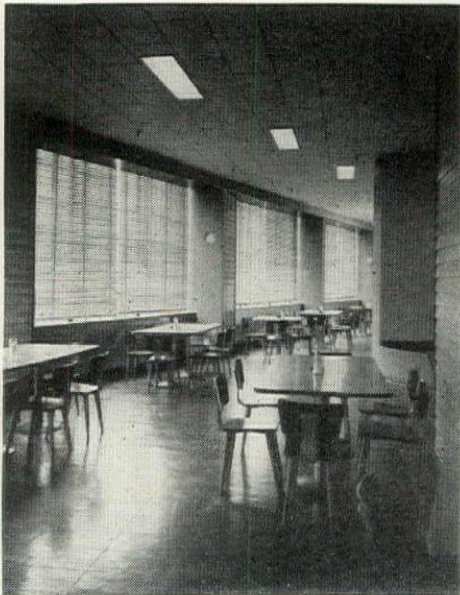
SEMI-PRIVATE DINING ROOM



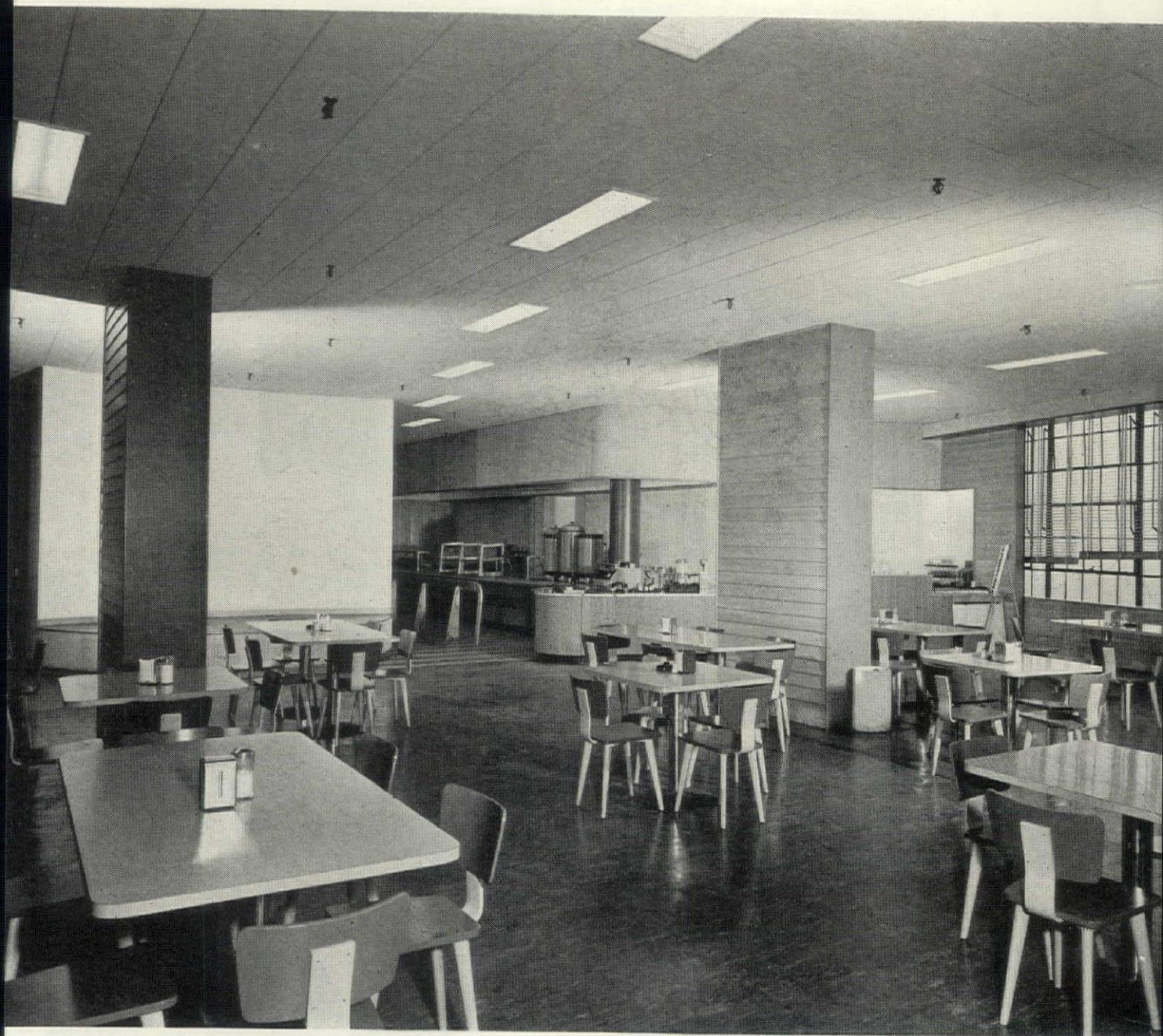
PATTERNED FLOOR COVERING RELIEVES EXPANSE OF FLOOR



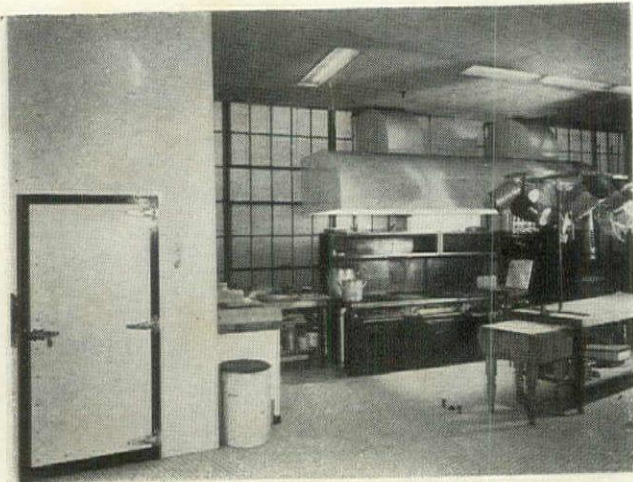
WINDOWS ADMIT ABUNDANT DAYLIGHT



ves the barrenness of the dining area. Equally ingenious is the treatment of the three small luncheon-conference rooms.



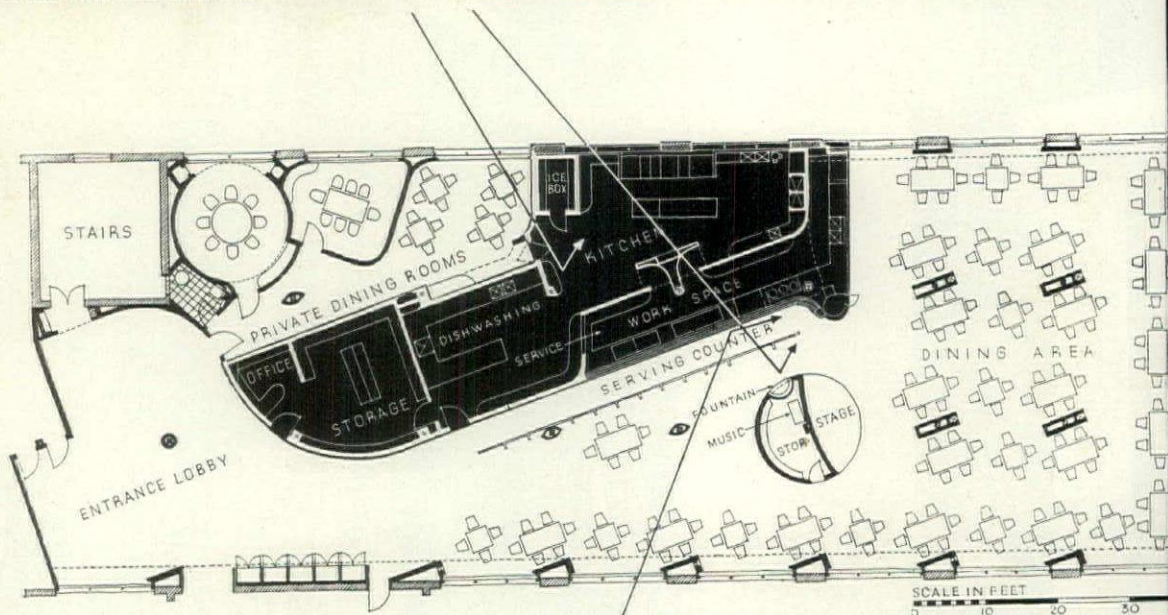
SERVING COUNTER TERMINATES AT THE CENTER OF THE DINING SPACE WITHIN EASY DISTANCE OF ALL TABLES



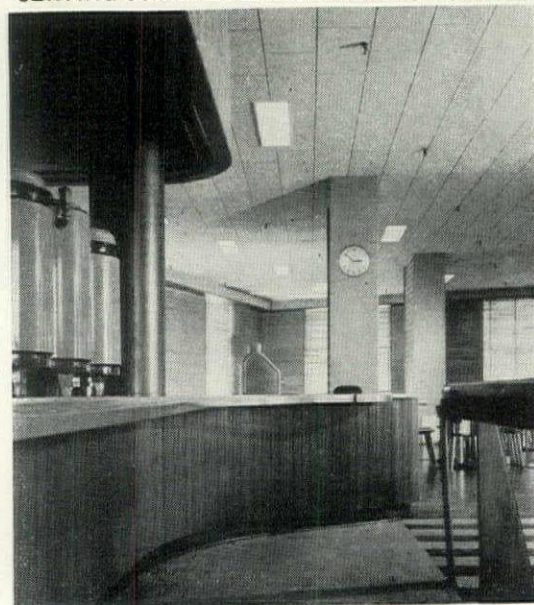
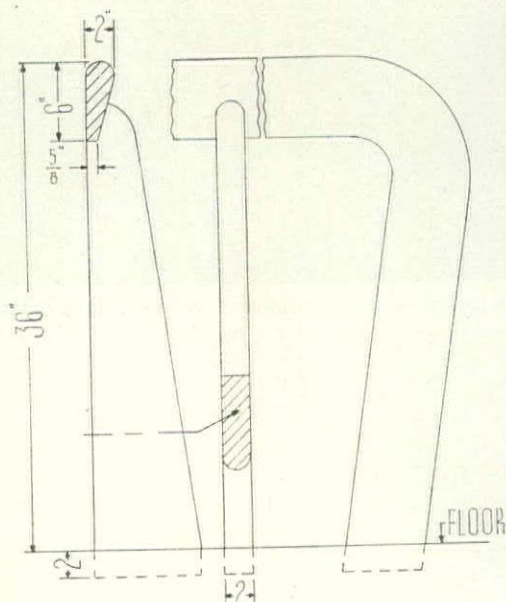
THE KITCHEN ACTIVITIES ARE SEPARATELY GROUPED



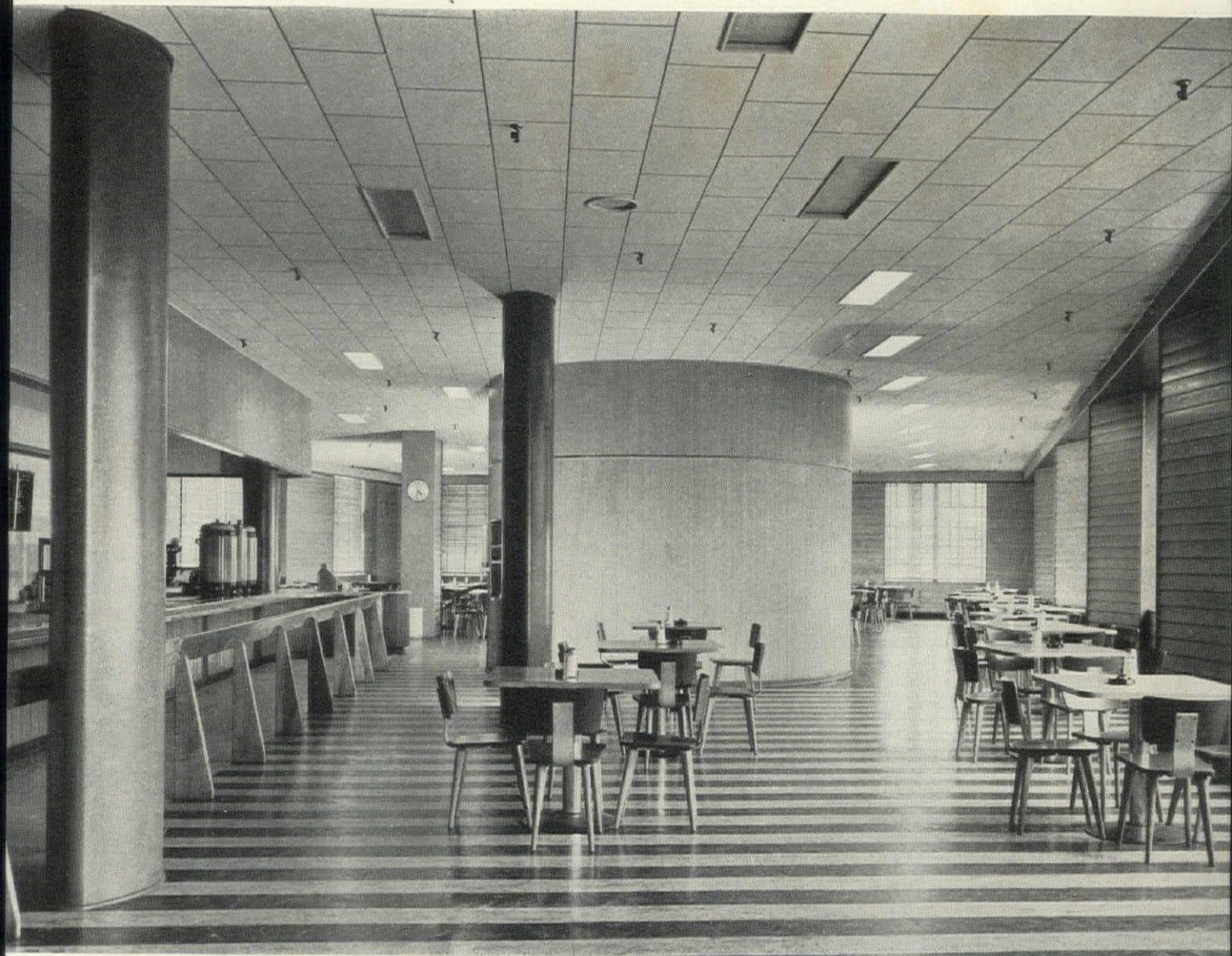
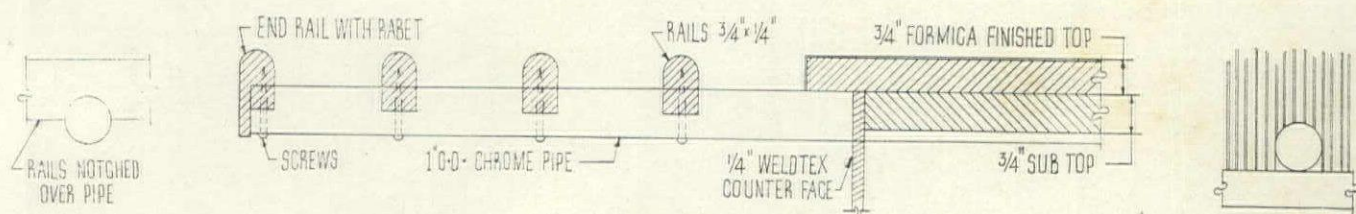
CASHIER'S DESK HAS GENEROUS COUNTER SPACE



SERVING COUNTER ENDS IN AN EASY CURVE



ing the public and private dining rooms. Its oblique position contributes to design interest and better proportioned space.



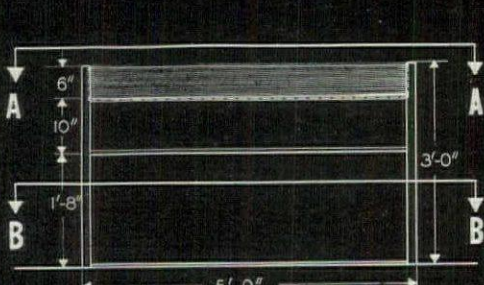
FREE - STANDING, CIRCULAR STAGE - STORAGE UNIT DIVIDES THE PRINCIPAL DINING AREA, ADDING TO PRIVACY

FINISHES AND EQUIPMENT: STRUCTURE: Interior partitions—white pine. Columns—bent plywood. Ceilings—tile, Flintkote Co. INSULATION: Walls and ceilings—rockwool batts, Johns-Manville, Inc. Floors—asphalt tile, Tile-Tex Co. WALL COVERINGS—Weldtex, U. S. Plywood Co., and red cedar siding. Kitchen, etc.—Marlite panels, Marsh Wall Products, Inc. FURNISHINGS—Specialty Cabinet Co., Artek Pascoe and A. H. Girard Co. Accessories—Parduci Studios. DOORS—Hurd Lumber Co. PAINTS—Pratt & Lambert and U. S. Gutta Percha Paint Co. ELECTRICAL FIXTURES—General Electric Co. SPECIAL EQUIPMENT: Radio-public address system, Detrola Engineering Dept., International Detrola Corp.

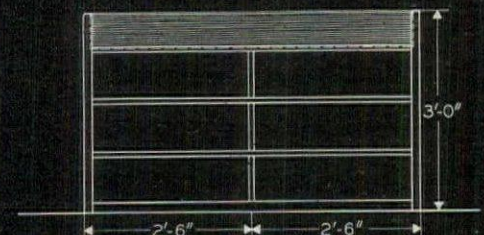
INTEGRATED DISPLAY CASES

GRUEN & KRUMMECK, ARCHITECTS

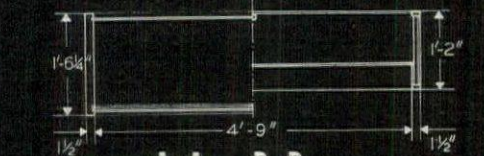
DESIGN DATA 22.
THE ARCHITECTURAL FORUM



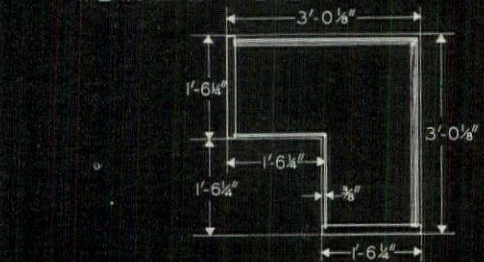
FRONT ELEVATION



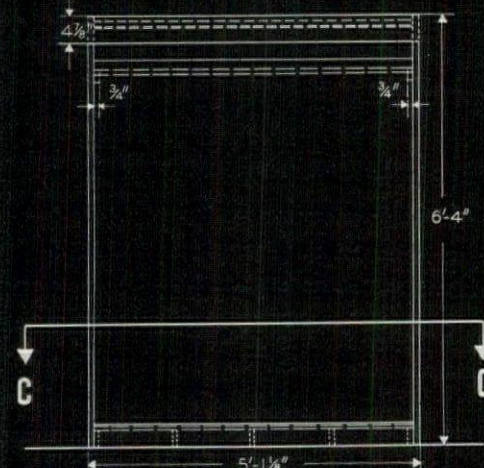
BACK ELEVATION



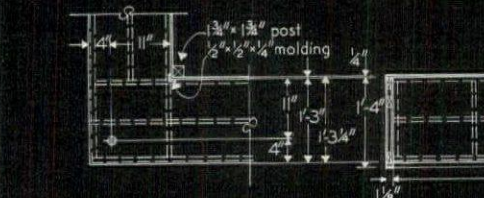
PLAN A-A B-B



CORNER PLAN

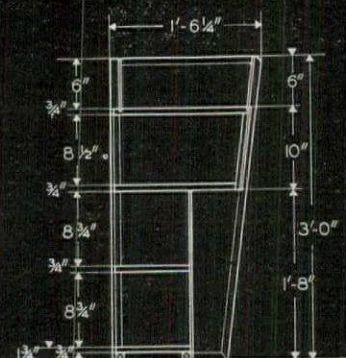


FRONT ELEVATION

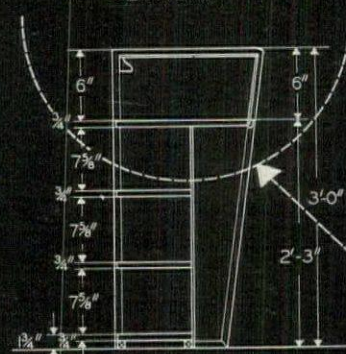


CORNER PLAN

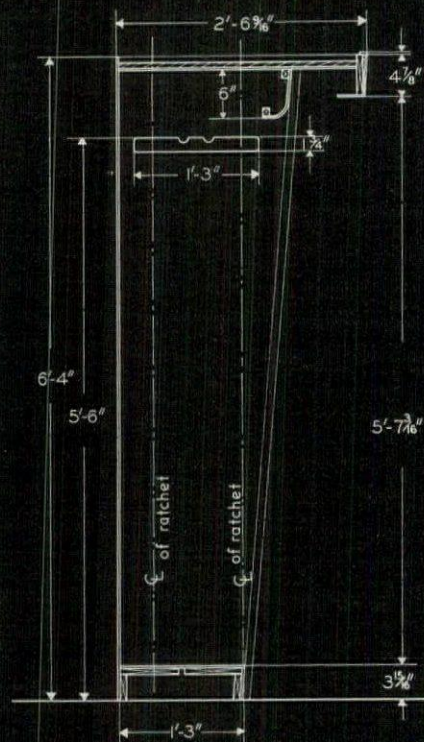
PLAN C-C



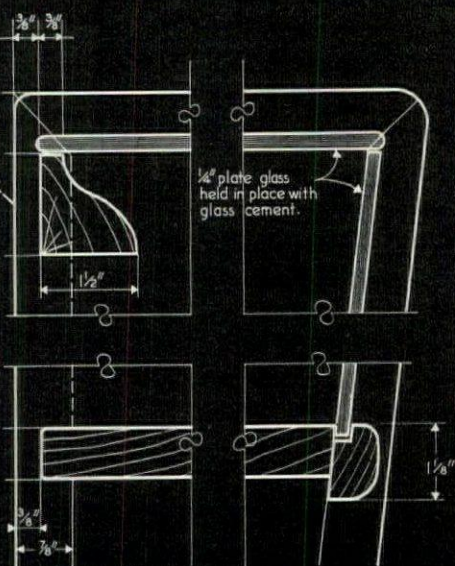
SECTION



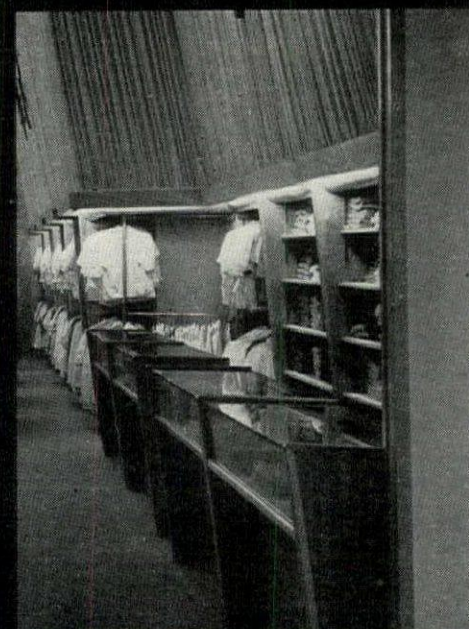
SECTION



SECTION
SCALE: 1/2" = 1'



5'-7 7/16"



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Courtesy Crane & Co.

MIAMI CABINET DIVISION
The Philip Carey Mfg. Company
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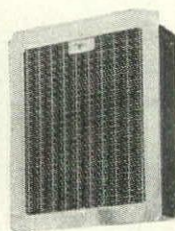
MIAMI BATHROOM CABINETS
MIRRORS AND ACCESSORIES
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Meanwhile, you will find the complete MIAMI Catalog a real help in planning your post-war bathrooms. Write for it now—address Dept. AF.

Towel Cabinet, at left, provides much needed towel storage. Five plate glass shelves, eight inches deep, are furnished with each cabinet.

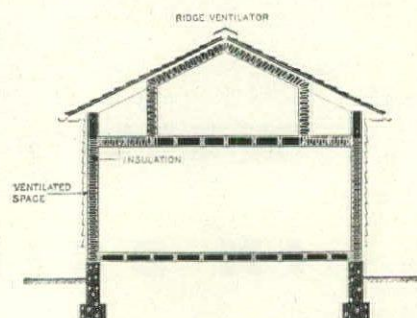
Framed in brilliant chrome, the electric room heater, illustrated below, rapidly removes the chill from the bathroom or dressing room.



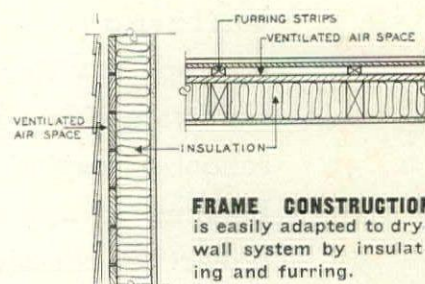
PRODUCTS AND PRACTICE (Continued from page 14)

penetrating the outer leaf cannot reach the inner leaf. Precautions are necessary at window and door openings to intercept the moisture which seeps through joints in the brickwork and runs down the inside of the outer wall. A weephole at the bottom carries this moisture outside.

According to the Adams theory, the addition of ports in the outer brick cavity wall would make these precautions unnecessary since little or no moisture would penetrate the outer leaf. Wall corners would have to be closed, however, to prevent the high air pressure built up in the windward side of the cavity wall from escaping to the low pressure lee side.



HOT AIR rises through ventilated wall and roof, escapes out ridge ventilator.



FRAME CONSTRUCTION is easily adapted to dry-wall system by insulating and furring.

In applying the drywall system to frame construction Adams has found that the only variations from normal procedure are vertical furring strips and the screen wire closure at the port. He recommends that roof insulation be applied between rafters to prevent radiation from the under surface of the roof boards which would break up natural circulation. In northern climates, however, such insulation could be installed below the ventilated space to prevent excessive heat loss in the winter. Screen wire for insect repulsion should be tacked along the lower edge of the sheathing before the vertical furring is installed, then brought around the lower end of the furring strips and secured to their outer faces. The finished wall surface which may be of any material, is then applied. If shingles or shakes are

(Continued on page 160)



HOSPITAL FOR CHRONIC DISEASES, WELFARE ISLAND, N. Y., YORK & SAWYER, BUTLER & KOHN, Associated Architects

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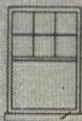
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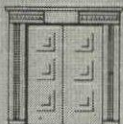
FIVE CONSECUTIVE ARMY-NAVY
"E" AWARDS



WINDOWS



REVOLVING DOORS



ARCHITECTURAL
METALWORK

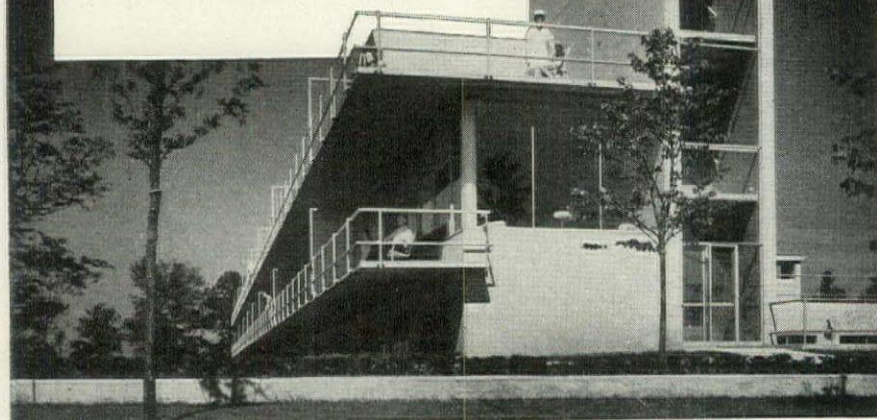


TABLETS

STATUARY



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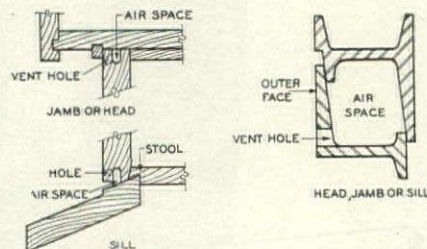
Affiliated with

Address

City State (108-10)

PRODUCTS AND PRACTICE
(Continued from page 158)

used it is necessary to cross strip horizontally over the furring strips for nailing. Window and door frames and sashes can be detailed on the principle of balanced pressure so that any air leakage which might occur around them will come from the dry air of the envelope rather than from the water-inducting outer air.



VENTED AIR principle applied to double hung wood sash and steel casement sash.

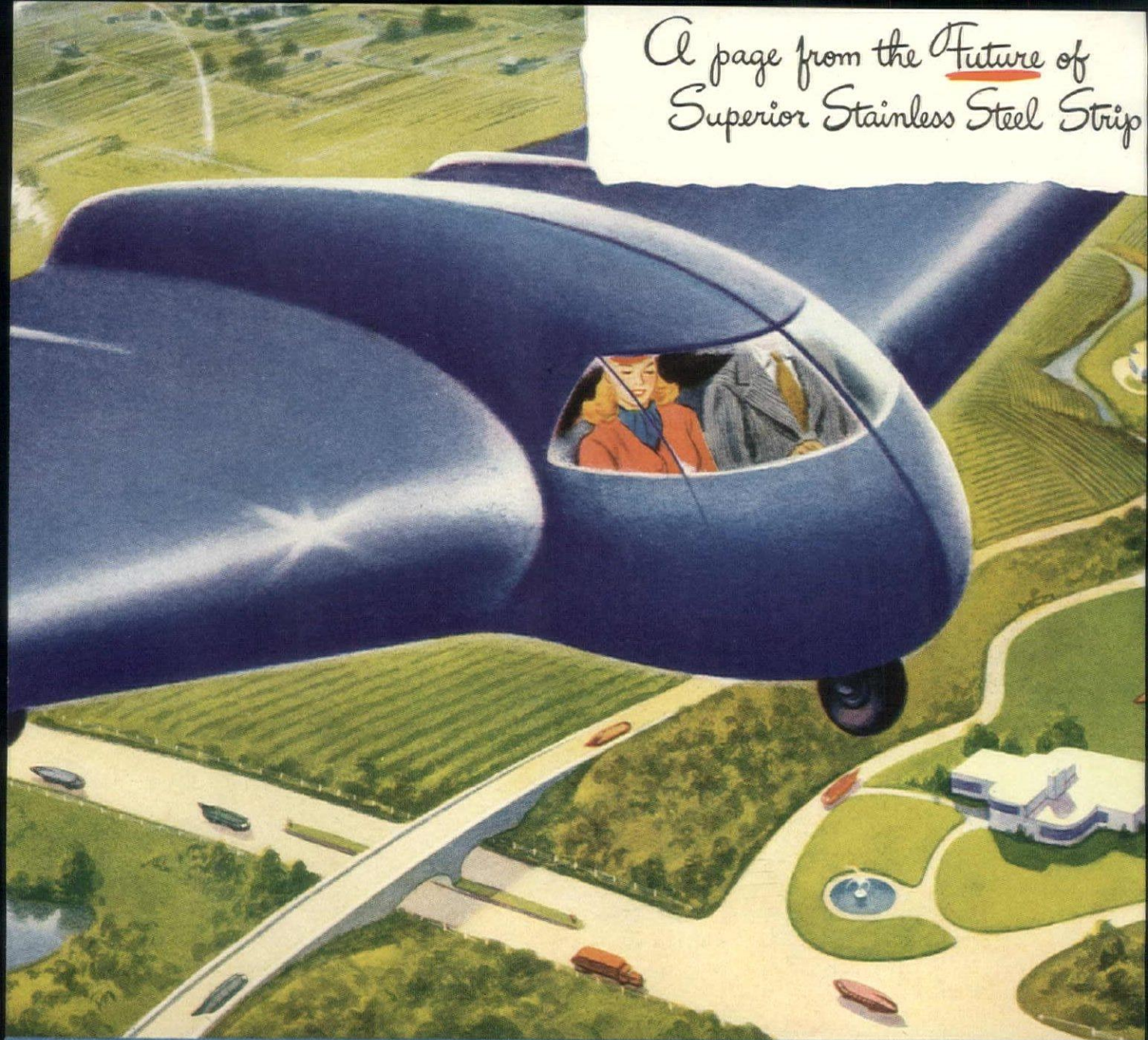
While working on water leakage, Adams discovered that the vented baffle wall can be made to do double duty as an almost perfect insulation against sun heat. Ventilated roof construction is also of great importance in this connection since roofs are naturally more exposed to the sun's rays than other parts of the house. This feature of Adams' system is an added advantage for year-round hot climates and for sections of the country which reach high temperatures during the summer. Stimulated by the sun's heat, the air of the wall envelope moves upward carrying the penetrating heat units ultimately to the ridge ventilator and discharging them to the outer air, thus effectively preventing their entrance into the building. Adams has employed dampers to close off the ridge vent in cold weather, but it is doubtful whether this is necessary with proper insulation and whether building owners could be depended upon to open and close the dampers at the proper time.

Although drywall construction has produced amazing results in Florida, its application to building in the north is still a matter for speculation. Many problems are involved which can be solved only by further experimentation. One such problem is that of heat loss which is apt to occur when hollow masonry walls are built in the ordinary manner without an airtight inner wall.

The exact worth of the system to various building situations cannot now be predicted, but laboratory evidence shows that the principle itself is correct.* Its possibilities are still to be worked out in terms of many types of construction and results should be limited only by the ingenuity of the experimenter.

* See BMS No. 7, Bureau of Standards.

A page from the Future of
Superior Stainless Steel Strip



YOUR PERSONAL PLANE of Sturdy Stainless Steel

While artists draw colorful dreams of *The Plane of Tomorrow*, hard-headed designers deal in facts! Materials are realistic . . . efficient structure, load capacity and economy are vital considerations. Superior Stainless Steel Strip is an important element in current planning for your plane of the future . . . strong and enduring . . . easily fabricated . . . ideally adapted for airframe construction, paneling and trim . . . supplied in long coils or cut lengths to specified width, thickness, and composition.

Superior Steel

CORPORATION, CARNEGIE, PENNSYLVANIA

Superior Stainless Steel Strip

**To keep
Your
Clients
Happy**

with the
"indoor climate"
in their homes

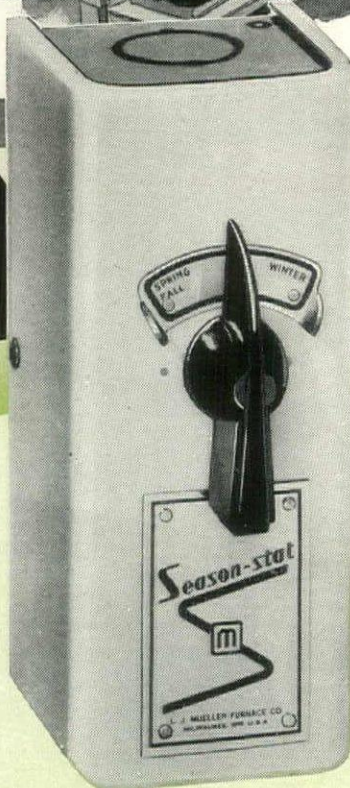
... keep the air moving with the Mueller Season- Stat Heat Control

In mild weather, the Season-Stat assures that air is delivered at a relatively low temperature, with the *continuous movement* essential to comfort and health. . . . This exclusive Mueller control is an attractive instrument which may be located on the wall of any first-floor room. It shuts off the gas valve or oil burner, or operates the damper motor on a coal-fired unit, in accordance with the temperature of the circulated air which has been determined by the setting of the pointer on the Season-Stat. Thus long periods of air circulation are attained under any outdoor temperature conditions. . . . It pays to allocate as much of the building budget as is necessary to secure true Indoor Comfort — the Mueller way. Specify a Mueller system . . . made by a company with an 87-year record of heating progress . . . and selected from a complete line that includes furnaces and winter air conditioners for homes of every size, type, and price range (old or new) . . . specifically designed for the fuel of your choice. . . . Write now for bulletins on Mueller equipment. . . . L. J. Mueller Furnace Co., 2001 W. Oklahoma Ave., Milwaukee 7, Wisconsin.

B-19

MUELLER *Climatrol*

HEATING AND WINTER AIR CONDITIONING



The Season-Stat is just one of the many features in the complete Mueller Line.



Gas Mueller equipment includes gas-fired winter air conditioners, gravity furnaces, and gas boilers.



Oil Just the right size and type for any home, in the complete Mueller oil-fired line.

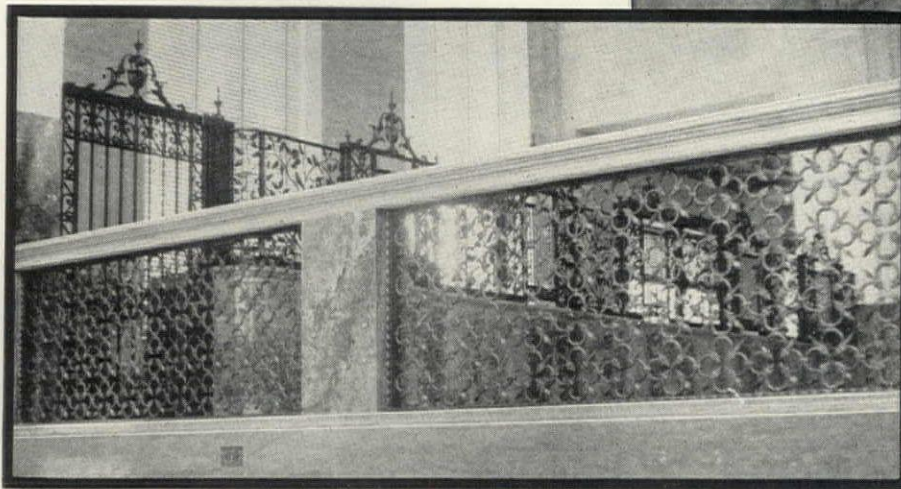


Coal Complete selection of coal-fired winter air conditioners and gravity furnaces, including special stoker-fired model.

Michael's Products

FOR YOUR POSTWAR PLANS

When you are working out your plans for the future it will be to your advantage to give Michaels products your most serious consideration. Since 1870 architects and builders have depended upon Michaels for faithful interpretation, in metals, of their most exacting demands. Feel free to talk over



your postwar plans with Michaels engineers. They will be glad to give you the benefit of their experience. ¶ Architects in all parts of the country have found in Michaels craftsmanship the full expression of their artistic ideals faithfully reproduced in everlasting metals. When the war is won and manufacturing restrictions lifted, all Michaels products will again be available to architect and builder.

First National Bank, Miami, Florida. All grille and ornamental work in the bank was produced by Michaels. Marsh & Sazelbye were the architects.

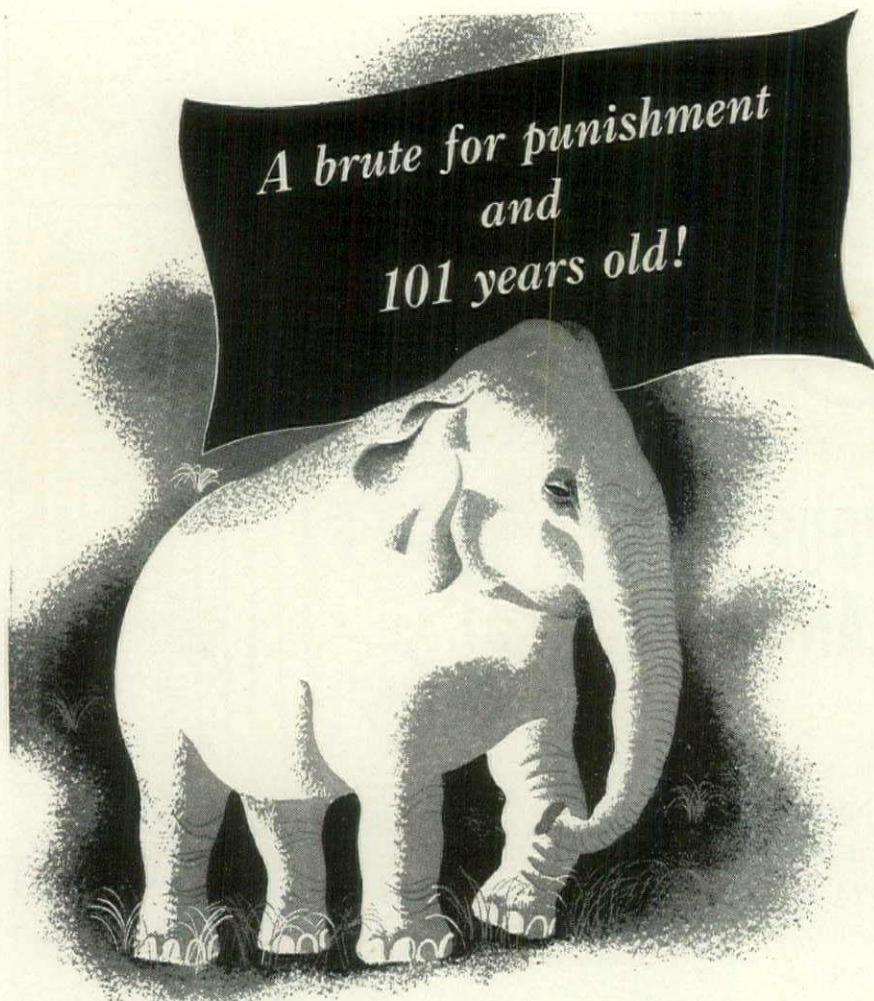


MICHAELS PRODUCTS:

- Fixtures for Banks and Offices
- Welded Bronze Doors
- Elevator Doors
- Elevator Enclosures
- Check Desks (standing and wall)
- Lamp Standards
- Marquise
- Tablets and Signs
- Name Plates
- Railings (cast and wrought)
- Building Directories
- Bulletin Boards
- Stamped and Cast Radiator Grilles
- Grilles and Wickets
- Kick and Push Plates
- Push Bars
- Wire Work
- Cast Thresholds
- Extruded Thresholds
- Extruded Casements
- Store Front Sash
- Exhibit Cases
- Parking Meters
- Bronze and Iron Store Fronts
- Bronze Double Hung Windows
- Bronze Casement Windows
- Bronze Markers and Plaques
- Wrought Iron Lighting Fixtures
- Bronze Lighting Fixtures

THE MICHAELS ART BRONZE CO., Inc., Covington, Kentucky

Manufacturers since 1870 of many products in Bronze, Aluminum and other Metals



If you are casting about for a beautiful paint that will wear as stubbornly as elephant hide... we earnestly suggest Eagle Pure White Lead, esteemed by American architects since 1843.

Thomas Jefferson knew and approved of white lead paint for exterior and interior surfaces. In England before him, Christopher Wren was solidly for it. As this most simple of paint mixtures (pure white lead ground in pure linseed oil) has preserved many of the world's architectural masterpieces, so Eagle Pure White Lead can safeguard the surface of the buildings you design.

In addition to its superb good looks, Eagle Pure White Lead has these most practical properties: (a) its tough film protects against the wear of time and weather; (b) by clinging tenaciously to the painted surface, expanding and contracting with it, Eagle Pure White Lead does not crack or scale; (c) it ages gracefully and slowly; (d) at repainting time, the surface is *ready*, requires no burning or scraping. As for coverage and economy... ask any master painter!

You need no priorities for Eagle Pure White Lead. Deliveries are prompt. And the cost is no more than that of other quality paints.

Let's ALL BACK THE ATTACK—Buy Another War Bond!

THE EAGLE-PICHER LEAD COMPANY, CINCINNATI 1, OHIO

Member of the Lead Industries Association



**EAGLE
WHITE LEAD**



MONTH IN BUILDING

(Continued from page 80)

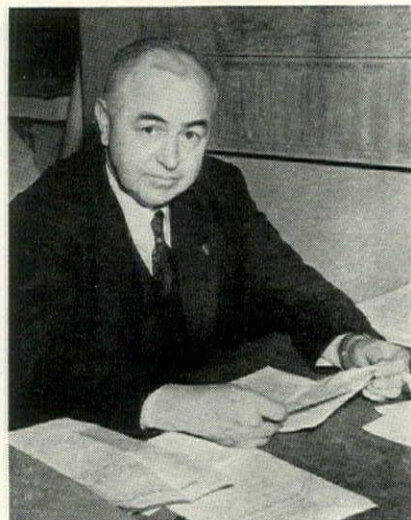
activities, the Senate Subcommittee on War Mobilization, headed by Senator Kilgore, found that 40-odd agencies and bureaus are spending about \$600,000,000 annually for research, as against an average prewar expenditure of \$50,000,000. But housing's research share has dwindled. In fiscal 1944 less than \$60.

Life Photo



HOUSING RESEARCH BACKERS are Senators Wagner (above) and Kilgore

AP Photo



000 was spent for housing research, as against a prewar annual figure of \$150,000. Similarly organized in many small, independent production units, agriculture is an often-pointed parallel to the building industry. For a long time, the federal government has done the laboratory job for agriculture, spending \$40,000,000 for this purpose in 1937 and 1938.

No existing federal housing agency has legislative authority to undertake housing research. The National Bureau of Standards conducts routine testing of building materials. Most of the \$60,000

(Continued on page 164)

U. S. ARMY PROVES MANY-LAYER PROTECTION IS BEST IN CLOTHING



What the Well-Dressed
G. I. Will Wear

The Army

G. I. Will Wear

The Army Quartermaster Corps has discovered that separate layers of cloth are warmer than one extra-thick layer, like an overcoat. They have designed a uniform which incorporates the "many-layer insulation" principle. As the weather gets colder, layers of clothing are added inside the outer shell, extra shirts, trousers, underwear. This many-layer principle is actually centuries old. Way back in the days of China's youth, coolies knew that two 4 lb. coats are warmer than one 8 lb. coat.

And in home insulation, too,
many-layer construction
is "tops"...

Only KIMSUL* has it!

KIMSUL is the only insulation with *many-layer* construction. For dramatic proof of the advantage of this, note how the U. S. Army uses the layer principle in insulating soldiers' uniforms. KIMSUL itself is used in the Army and Navy's famous Quonset huts, which shelter fighting men against arctic cold and tropic heat.

The KIMSUL *many-layer* principle is scientifically superior to that of loose, "bulk insulations," and to blankets with only one or two plies. (KIMSUL Double-thick has 44 layers, and KIMSUL Standard has 22.) By test, it is one of the best heat stoppers known.

KIMSUL layer insulation, unlike bulk insulation, gives uniform coverage over every square inch of insulated area. The density of the material does not vary; hence, there are no heat leaks through inadequately protected spots.

Furthermore, KIMSUL, unlike bulk-insulation, cannot sift or settle. Rows of strong stitching hold the blanket's shape permanently, prevent sagging. KIMSUL stays put, and stays RIGHT, for the life of the structure in which it is installed.

← A great testimonial to KIMSUL... The famed Quonset prefabricated military huts, shown at left, are insulated with KIMSUL to keep our boys comfortable in the bleakest arctic wastes and in the jungle heat.



Official U. S. Navy Photo

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INSULATION

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**Kimberly
Clark**
RESEARCH

*KIMSUL (trade-mark) means Kimberly-Clark Insulation

KIMBERLY-CLARK CORPORATION

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Building Insulation Division, Neenah, Wisconsin

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"Save Man-Hours and Man-Power on Every Job."
☐ Also have a KIMSUL representative call.

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Address _____

City _____ State _____

☐ Architect ☐ Contractor ☐ Builder



At last! The Beauty of Tile plus the advantages of quiet, resilient Linoleum!

Patterned in 9-inch Cross-Directional MARBLED SQUARES!

EASY TO DECORATE WITH!
—No two Marbled Squares alike. Each 9-inch square has its own distinctive graining, exquisite marbleizing and real depth of color. Each is set cross-directional to enhance the beauty of the pattern and simplify the hiding of seams. Plan limitless effects with "off-the-roll" economy!

EASY TO REPAIR OR MAKE PARTITION-CHANGES! Any area or single 9-inch Marbled

Square can be replaced if damaged or heavily worn without appearance of "patching."

EASY TO KEEP YOUNG-LOOKING!—Pabco Linoleum is *Soil-Sealed* to resist dirt, stains and scuff-marks; *Super-Waxed* to make for easier — and less frequent — cleaning!

EASY TO WALK ON!—Quietness and resilience are *built-in*!

FREE! Write for "Architectural Trends in Linoleum." 24 pages, full color, Dept. 54, nearest Pabco office below:



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NEW YORK 16 • CHICAGO 54 • SAN FRANCISCO 19
Makers, also, of Pabco "Stainless Sheen" Surfaced Guaranty Rugs and Floor Coverings



MONTH IN BUILDING

(Continued from page 162)

spent last year for housing research came, however, from the budget of WPB's Office of Production Research and Development. But even this slim purse is now empty; OPRD has recently canceled all housing studies.

The Office of Housing Research would be headed by a \$10,000-a-year director, appointed to a 6-year term by the President. No annual expenditure is specified by the bill, but Senatorial sponsors are looking forward to appropriations amounting to around \$20,000,000 annually. If, as sponsors point out, technological development could cut the cost of every U. S. house by \$1,000, the return on the public investment would be substantial.

NEWS NOTES

\$6,000 House. According to the newest assay of the rich lode of postwar home buying power, conducted on a nationwide basis by Masonite Corp., many customers expect to get a house for \$6,000 or less. Half of those gallupollered by Masonite said they expect to spend between \$4,000-\$6,000, one-fourth said they would spend up to \$10,000. One in six hopes to pay less than \$4,000; only one in twenty plans to spend more than \$10,000. No marked preference for either traditional or modern style was expressed, but almost everybody emphasized convenience and ease of maintenance. Wood was preferred as an exterior finish, but brick veneer, solid brick and stone were runners-up. A combination living-dining room was favored by those expecting to pay less than \$4,000, but got small approval from those who expect to pay more. More than a third of all participants said they would rather have a ground floor utility room than a basement.

Reconstruction sans Bathtubs. Among the wreckage of Cassino—scene of some of the bitterest fighting of the Italian campaign—125 new houses will soon go up. But Italians who hoped for modern plumbing and lighting will be disappointed. Turning down a request for these conveniences, the Allied Control Commission for Italy pointed out that former houses did not have them.

3,000 Construction Jobs. New York City is looking for 790 tons of bolts, washers and nuts. Lack of these stopped construction of the giant \$87,000,000 Brooklyn-Battery tunnel in January, 1943; the cast iron sections that line the tunnel had all been made before war cut-down. Renewing the City's application for the missing bolts, Mayor LaGuardia said he wanted to test WPB's willingness to speed reconversion preparations so that

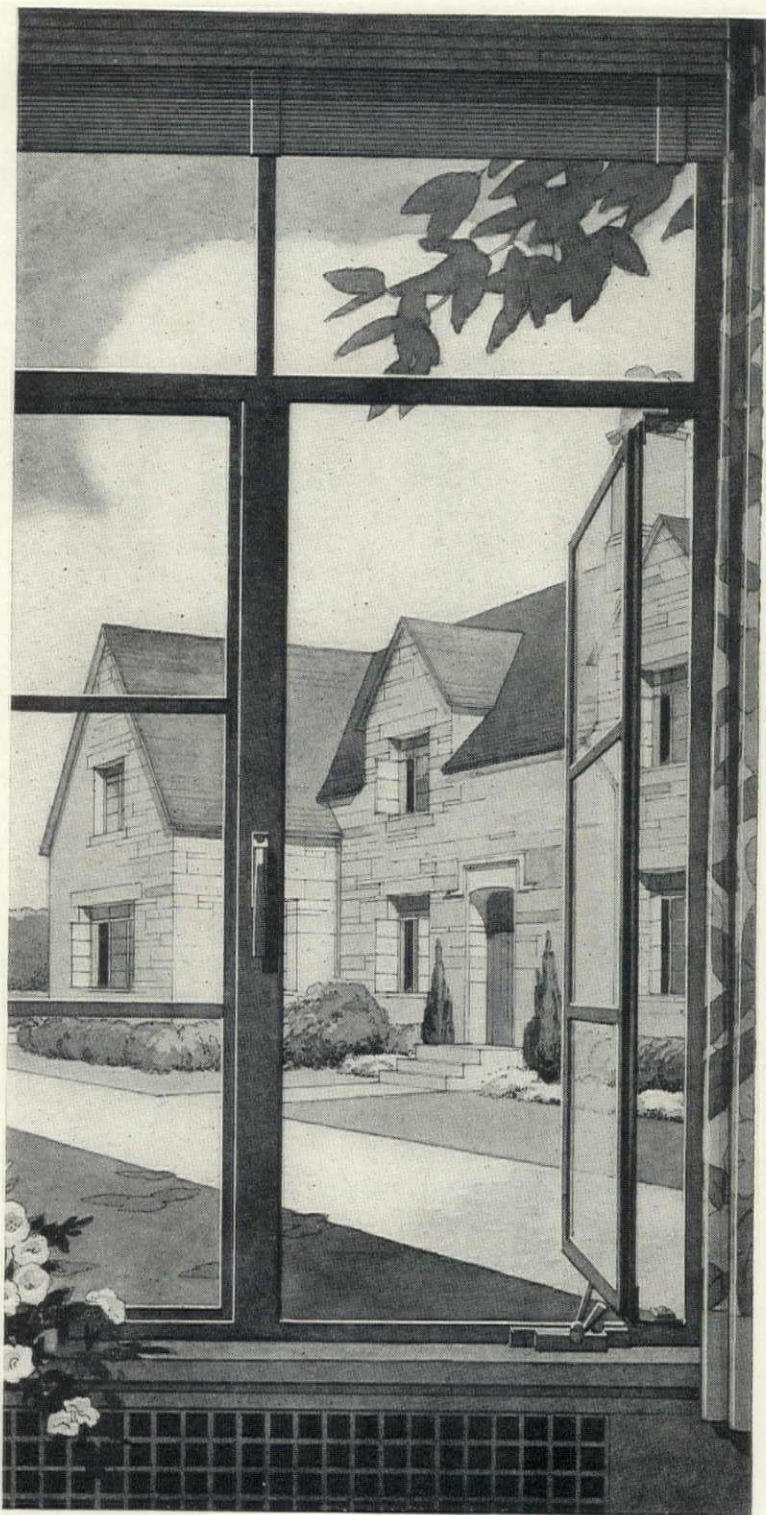
(Continued on page 166)



Homes designed with Lupton Metal Casements are assured of added beauty and livability in every room. Completely weathertight yet easy to operate, Lupton Metal Windows meet every requirement for natural ventilation and abundant daylighting. With Lupton, you get dependability backed by an experience of more than forty years in modern metal window design.

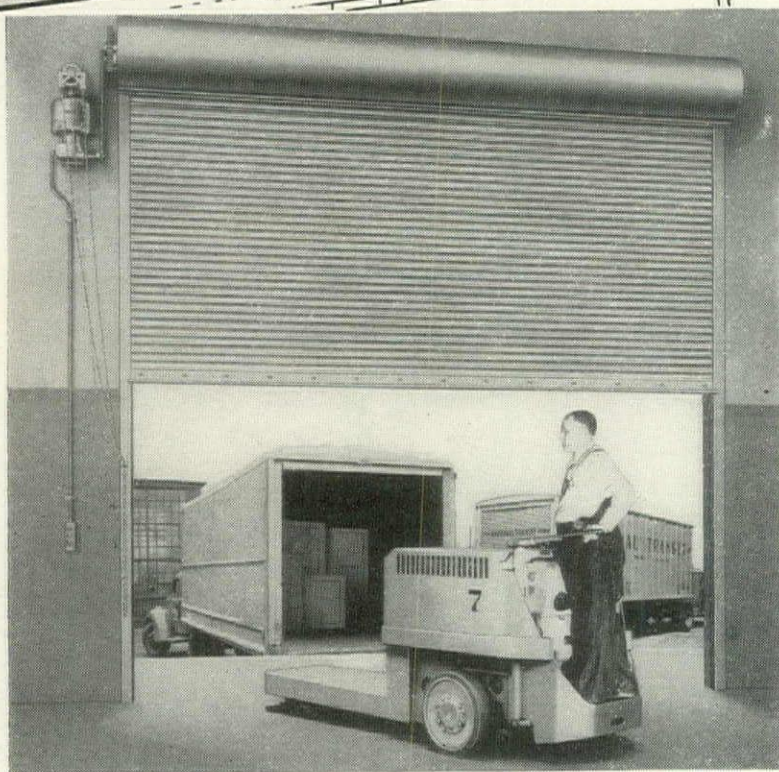
See our Catalog in Sweet's

MICHAEL FLYNN MANUFACTURING CO.
E. Allegheny Ave. at Tulip St., Philadelphia 34, Pa.



LUPTON METAL WINDOWS

AN AID TO APPROVAL IN POST-WAR PLANS



You take a step toward quicker approval of post-war plans when you specify Kinnear Rolling Doors. Clients recognize the advantages of Kinnear Door's *coiling upward action* — the savings in space . . . complete clearance of the opening . . . their greater resistance to intrusion, accidental damage, fire and the elements . . . the extra ruggedness of their sturdy all-steel construction . . . their neater appearance . . . their extra efficiency when motor operated — and many other features backed by nearly 50 years of proved performance!

Be sure you have full details on Kinnear Rolling Doors now. Kinnear's large engineering staff and nationwide organization are ready to work with you on any problem. Write for information. The Kinnear Mfg. Co., 1640-60 Fields Ave., Columbus 16, Ohio.

SAVING WAYS
IN DOORWAYS

KINNEAR

ROLLING DOORS

MONTH IN BUILDING

(Continued from page 164)

jobs would be ready when manpower is available. The Mayor thought his tunnel would provide 3,000 jobs.

Coordinated Furniture. It used to be done with what was known as a "suite", but nowadays sophisticated furniture buyers prefer what the trade calls "related styling". To give some help to the customer lost among a welter of traditional and modern styles, nine Grand Rapids furniture manufacturers have joined hands to distribute both furniture and accessories designed to fit into a unified decorating scheme. Some 200 registered furniture stores will sell the correlated designs produced by members of the Grand Rapids Furniture Makers Guild.

Chewing Gum Plants. Apparently figuring that chewing gum will hold its own in the postwar world, William Wrigley, Jr., has announced a decentralization program that will take gum manufacturing closer to its market. Chicago architects Shaw, Naess & Murphy are now at work on preliminary sketches for three new plants, where gum will be rolled out in air-conditioned rooms, back of glass-bricked walls. Raw materials will enter the plants through a top tower, be fed down to ground level automatically. Plants will be located in the East, South and Pacific Coast; specific sites have not yet been chosen. Wrigley's main manufacturing plant is in Chicago.

St. Paul Remodels. Looking around for somebody to plan a remodeling job for its central business district, St. Paul, Minn., settled on New York industrial designer Raymond Loewy, who will start by making a five-month survey. Hope is that individual property owners will adopt the Loewy plan and remodel to fit into it as soon as possible.

Occupational Design. Smart merchandiser W. & J. Sloan, which serves up high-priced furniture with substantial eclat, not long ago hired an astrologist to inspire living rooms keyed to personality as read in the stars. The National Association of Home Builders has not yet gotten around to taking up astrological design, but they do have a new angle which they find pretty enchanting — houses designed around the occupation of the owner. NAHB is offering both prizes and publicity for designs in these classifications: the City Home, the Suburban Home, the Industrial Workers' Home, the Farm Home, the Summer Resort Home, the Veteran's Home, and the Home for Two. The 100 best designs will be exhibited at NAHB's meeting in Chicago next January. Architects

(Continued on page 168)

**TOMORROW'S HOME
WILL BE A BETTER HOME
IF EQUIPPED WITH
ROUND OAK PRODUCTS**



1871-1944

ROUND OAK'S

73rd Anniversary



BUY ANOTHER WAR BOND TODAY!

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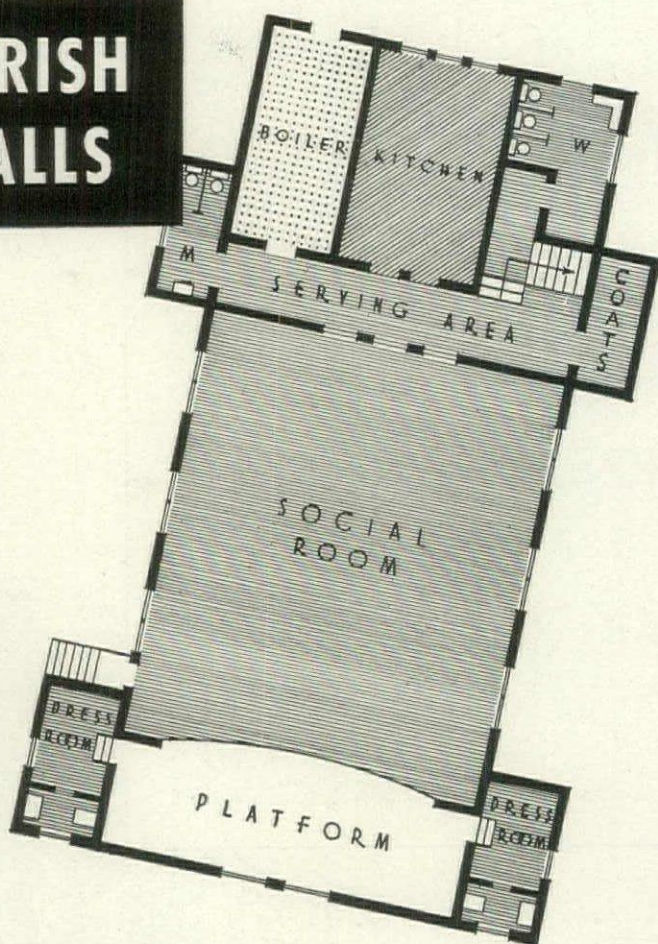
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KITCHEN APPLIANCES

ROUND OAK COMPANY • DOWAGIAC, MICHIGAN

Here's our advice on floors

for PARISH HALLS



-  **Standard Asphalt Tile** is ideal for the social room and serving area, as well as for dressing rooms and lavatories. A good-looking, low-cost floor, it is easy to clean and keep clean. Armstrong's Asphalt Tile is used on suspended, on grade, or below grade floors.
-  **Industrial Asphalt Tile** offers a rugged, long-wearing flooring for the boiler room. It is nonsparking and fire resistant. Industrial Asphalt Tile stands up well under heavy traffic conditions. It can be installed quickly over concrete floors on or above grade.
-  **Greaseproof Asphalt Tile** is a specialized floor that solves the problem for areas which are subject to grease or fats. It has all the advantages of Standard Asphalt Tile, too—including use on every type of floor—on or below grade, or suspended.

P.S.

For full information about the complete line of Armstrong's Resilient Tile Floors—including Armstrong's Linotile (Oil-Bonded) and Armstrong's Conductive Asphalt Tile—and Armstrong's Safety Floor Coating, a new, nonslip ramp covering, consult Sweet's or write to Armstrong Cork Co., Resilient Tile Floors Department, 2310 Duke St., Lancaster, Pa.



INDUSTRIAL
ASPHALT TILE

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GREASEPROOF
ASPHALT TILE

LINOTILE
(OIL-BONDED)

CONDUCTIVE
ASPHALT TILE

ARMSTRONG'S RESILIENT TILE FLOORS

MONTH IN BUILDING

(Continued from page 166)

will get full credit and publicity for prize-winning and exhibited designs, NAHB said, but must submit them through builders who are active members. The contest closes October 20.

HOUSING SUBSIDY?

Although the U. S. has worried as much as any other nation you could name about low cost housing, the federal government has never extended a subsidy arm on which the operative builder might lean for a promenade in the low cost field. Nor have U. S. housebuilders ever betrayed any noticeable enthusiasm for such a supporting arm. Prudent private enterprisers fear that the arm of public subsidy will soon begin to feel more like a harness. Prudent economists warn that direct subsidy for housing has the effect of freezing high construction costs. But last month Great Britain's Minister of Health, Henry Willink, said that, in the face of construction costs that have jumped 100 per cent, the government believed it would be necessary to offer some form

AP Photo



BRITAIN'S WILLINK says yes to subsidy

of direct subsidy to postwar private housing enterprise.

This statement of official policy was precipitated by a report offered the Ministry by its Central Housing Advisory Committee, which recommended a subsidy amounting to "a substantial proportion of the difference between the actual average cost of building immediately after the war and the estimated average cost when building prices have reached stability." The Committee thought the subsidy should be "simple and readily understood," suggested "either an annual payment over a period of years, or an equivalent lump sum grant on completion of the house."

(Continued on page 170)



TIPS ON TOMORROW *from* TEXAS

★ Probably the most recently completed of all skyscrapers is the new Mercantile Bank Building in Dallas, Texas.

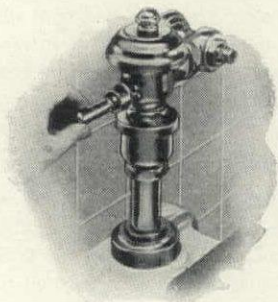
Designed to anticipate the banking needs and the requirements of modern business for years to come in a lusty, growing city, this new skyscraper has been termed by some "the building of tomorrow".

New materials, new ideas and the latest thoughts on functional design found widespread use in this forward-looking building. In keeping with its use of the finest in equipment, Watrous Flush Valves were installed throughout.

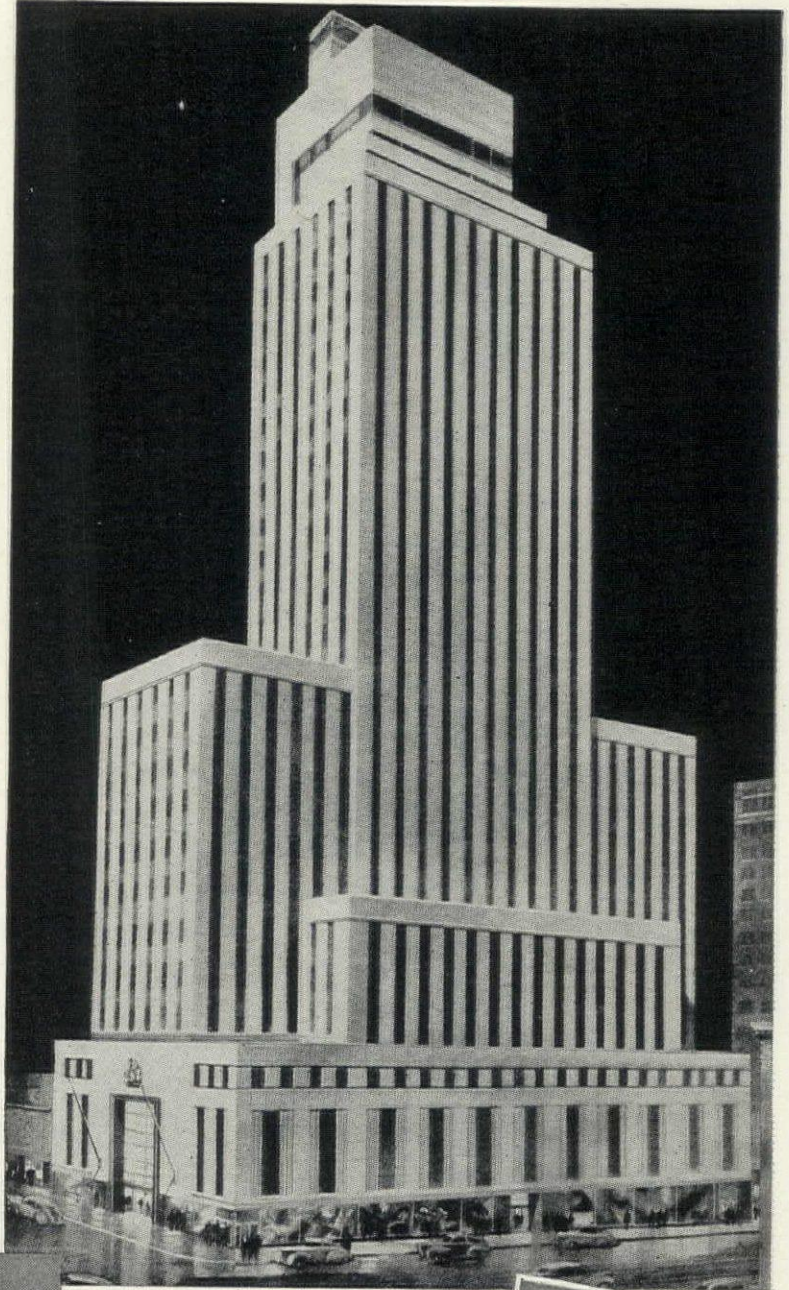
In this choice of Watrous there is further evidence that for postwar buildings, more and more attention will be given to the selection of flush valves that—

- (a) can be readily adjusted to give maximum water savings with each individual fixture.
- (b) provide a simple, single-step method of servicing.
- (c) can be supplied with efficient, enduring silent-action equipment.

In planning buildings for tomorrow, you can count on Watrous for dependable flush valves that will match fully the latest developments in building construction.



THE IMPERIAL BRASS MFG. CO.
1238 W. Harrison Street, Chicago 7, Illinois

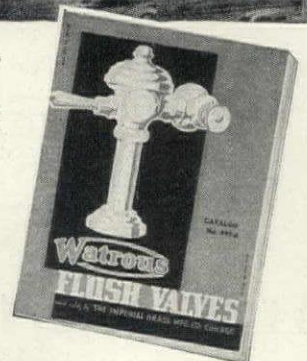


Mercantile Bank Building, Dallas, Texas, is equipped throughout with Watrous Flush Valves.

W. W. Ahlschlager & Company, Architect.
C. Wallace Plumbing Co., Plbg. Contractor.

Catalog 448-A covers Watrous Flush Valves for essential war-time applications and the complete line of models and combinations for post-war planning.

Or see Sweet's Catalog File.



Watrous

Flush Valves

FIAT ANNOUNCES

a postwar standardization of shower cabinet sizes

To establish a standard for architects and plumbers to use in future construction, Fiat is presenting the following *sizes to the trade now for the purpose of expediting postwar planning. Fiat showers will be classified into four groups according to structural design (details to be announced later) based on the general price range of prewar models.

GROUP NO. 1

Skipper type,
low cost shower

32 x 32 x 76

GROUP NO. 2

Cadet type,
medium priced shower

32 x 32 x 80

36 x 36 x 80

36 x 36 x 80 (corner)

GROUP NO. 3

Marine Ensign type,
for "above average"
installations

32 x 32 x 80

36 x 36 x 80

40 x 40 x 80 (corner)

GROUP NO. 4

Admiral type,
de luxe class

32 x 32 x 80

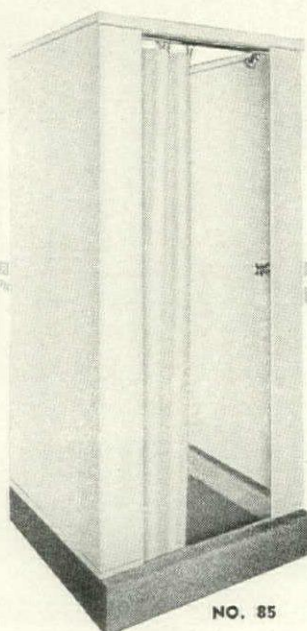
36 x 36 x 80

40 x 36 x 80

36 x 40 x 80

40 x 40 x 80 (corner)

*Measurements conform to the American Institute of Architects 4" unit module system.



NO. 85

AVAILABLE FOR DELIVERY NOW

No. 85—the best shower made under wartime material restrictions. Full size, 36 x 36 x 78—Deep type receptor—Heavy 1/4" MASONITE walls.

No. 80—Volunteer, has remarkable strength and is easily erected. Size, 32 x 32 x 76 and 30 x 30 x 76.

Fiat's postwar line of showers will be modernized to take full advantage of advanced design and recent material developments. Included will be standard types of receptors for tile, slate and glass walls and a complete line of glass doors with the exclusive Fiat adjustable jam feature. All shower cabinet models will retain the distinctive Fiat characteristics — leakproof, beauty and trouble-free construction that have made Fiat showers the standard of value with the trade for over twenty-five years.

FIAT METAL MANUFACTURING COMPANY

1205 Roscoe St., Chicago 13, Ill.

21-45 Borden Ave., Long Island City 1, N. Y. • 32 S. San Gabriel Blvd., Pasadena 8, Cal.

MONTH IN BUILDING

(Continued from page 168)

Some measure of control of selling price or rents and of standards of size and construction would be necessary, the Committee agreed.

Great Britain has had earlier experience with housing subsidies, as have a number of other countries. But on the whole, subsidies have been much less favored than government loans or government guarantee of private loans, according to a weighty piece of research just finished by the National Housing Agency's Division of Urban Development. Summarizing the history of housing aids in nine countries, NHA probes found that a widespread policy of providing low cost homes by public construction was followed by interest in stimulating private building activity—a transition resulting from recognition of the close relationship between activity in the construction industry and the general level of employment. Highlights of NHA's report on five countries whose housing experience has recently been crowded out of the news by bigger headlines:

Finland has made extensive use of second mortgage loans, offered both to limited dividend corporations and to private persons building on their own account. At the end of the first Russo-Finnish war, the President approved new housing laws calling for:

- ▶ Federal loans for low cost housing, made directly to municipalities and through them to private builders, to cover up to 40 per cent of construction costs. Five per cent interest is charged and the loan is payable within 25 years.
- ▶ Federal guarantee of private loans on multi-family low-rent projects.
- ▶ Rent subsidy for low-income families with three or more children.
- ▶ Loans up to 30 per cent of costs, made to joint stock companies. The company must provide 25 per cent of costs; four-fifths of the buildings must be earmarked for occupancy by stockholders.

Sweden's private builders accounted for 60 per cent of all construction in 1941, with help mainly from state loans. National banks provide first and second mortgage loans for urban real estate owners. Government capital, plus rigid state control of loaning operations, makes possible the very low interest rate of 3 per cent.

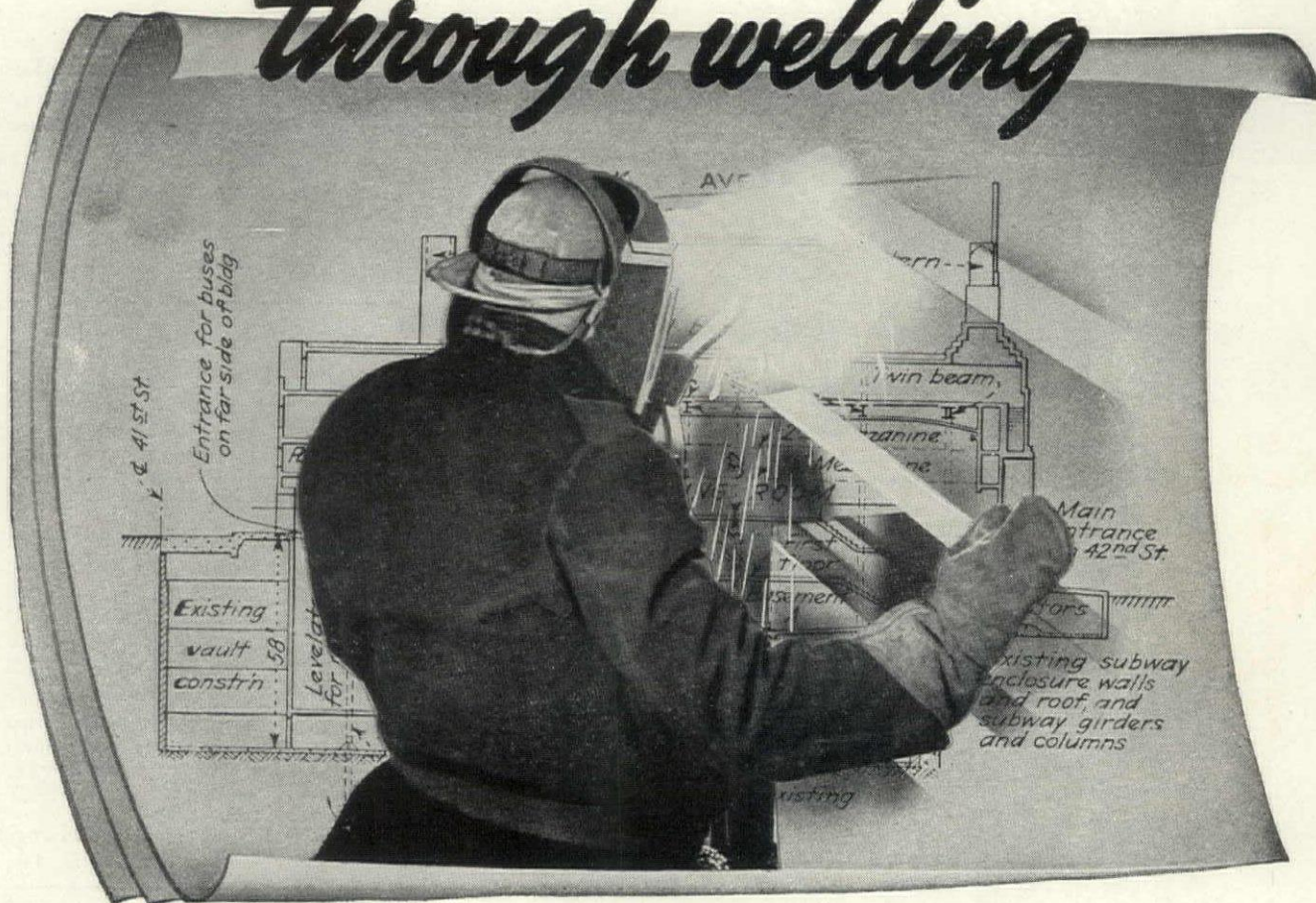
In 1933 Sweden took steps to combat depression and pursue an active population policy, providing:

- ▶ Improvement grants and construction loans for rural properties.
- ▶ Special loans for the building of

(Continued on page 172)

BETTER STRUCTURAL DESIGN

through welding



ALTHOUGH welding has made amazing progress as a structural fabrication method, full advantage is not always taken of the special adaptability of welding to the most modern types of construction. Also, details of design as used in practice, often have not provided for the most efficient use of welding.

For example, in some buildings it is desirable to develop continuity of beams, columns and girders, not only to save steel material, but also to reduce depth of framing and thereby to facilitate the provision of smooth modern interior surfaces. Here all-welded design facilitates this objective to an unusual degree.

There are many other practical features of welding as a structural method that merit full consideration... its demonstrated savings in steel... its quietness on erection work... its more efficient application due to the great increase in the number of trained welders and foremen who are becoming available for welding as war production decreases.

Representatives of Airco's Applied Engineering Division have acquired extensive experience in the application of welding to many types of war and peacetime structures. Architects, engineers and designers are invited to make use of their experience in working out problems of structural design.

Write to Dept. AF, at the New York address.

★ BUY UNITED STATES WAR BONDS ★



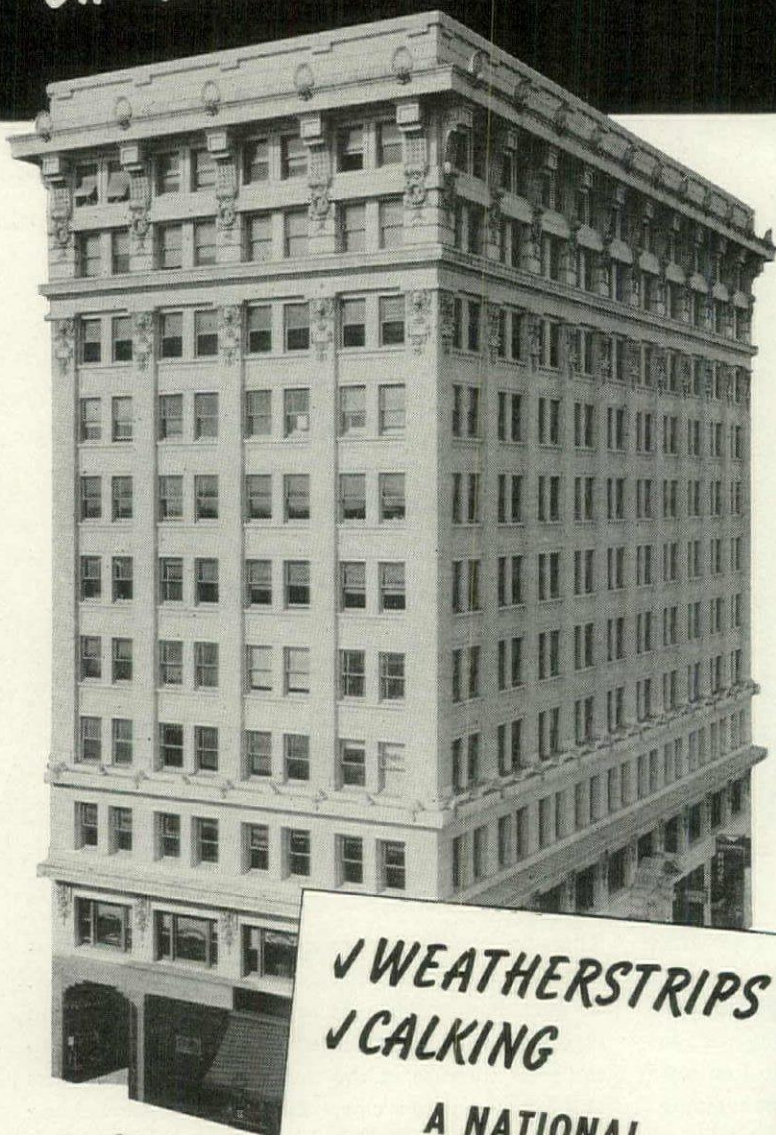
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On Remodeling Jobs NOW!**



**✓ WEATHERSTRIPS
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**A NATIONAL
ENGINEERED SERVICE**

The practical value of Chamberlin Metal Weatherstrips and Calking has been proved many times over on hundreds of buildings and institutions throughout America. These two vital remodeling products not only help conserve fuel and reduce maintenance costs but have been instrumental in forestalling many serious structural failures. Before you remodel, get full details from any Chamberlin factory branch or write direct to the factory.

*Call a
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CHAMBERLIN

Metal Weather Strip Co., Inc. • 1327 LaBrosse, Detroit 26, Mich.
Factory Branches in all Principal Cities

MONTH IN BUILDING

(Continued from page 170)

houses for large families, plus rent subsidies.

By 1942 rents were high, construction costs were high, and Sweden faced a severe housing shortage. As easement, direct subsidies, in the form of interest-free and amortization-free loans, were introduced. These supplementary loans cover 90 to 95 per cent of additional cost resulting from wartime price increases.

Denmark has many mortgage credit co-operatives—associations of owner-borrowers which obtain funds by issuing bonds, with members jointly responsible to bondholders. This type of housing

British Combine



BULLDOZER IN BATTLE DRESS has been developed for the Army Engineer Corps, on the basis of lessons learned in North Africa and the South Pacific. The armored car protects the driver against sniper fire and fragmentation land mines.

credit is supplemented by both state and municipal mortgage loan funds.

When the Germans occupied Denmark, the Danes increased their efforts to promote construction activity. Reasons: employed Danish workers were less likely to be drafted to work for the Germans; the building product—durable and immovable—was of much less use to the Germans than any exportable commodity. These aids were introduced:

- ▶ Special loans for slum clearance operations.
- ▶ Low-interest loans to builders of multi-family dwellings.
- ▶ Tax exemption for 22 years for all new building started before April, 1943.
- ▶ Subsidies for agricultural construction amounting to 25 per cent of expenditures for wages or Danish materials.
- ▶ Subsidies up to 30 per cent of cost for urban home repairs.

Eire offers both grants and loans from state funds to private persons, limited dividend companies and local authorities building houses in urban and rural areas. The government carefully stipulates design standards for houses on which it makes grants—for example,

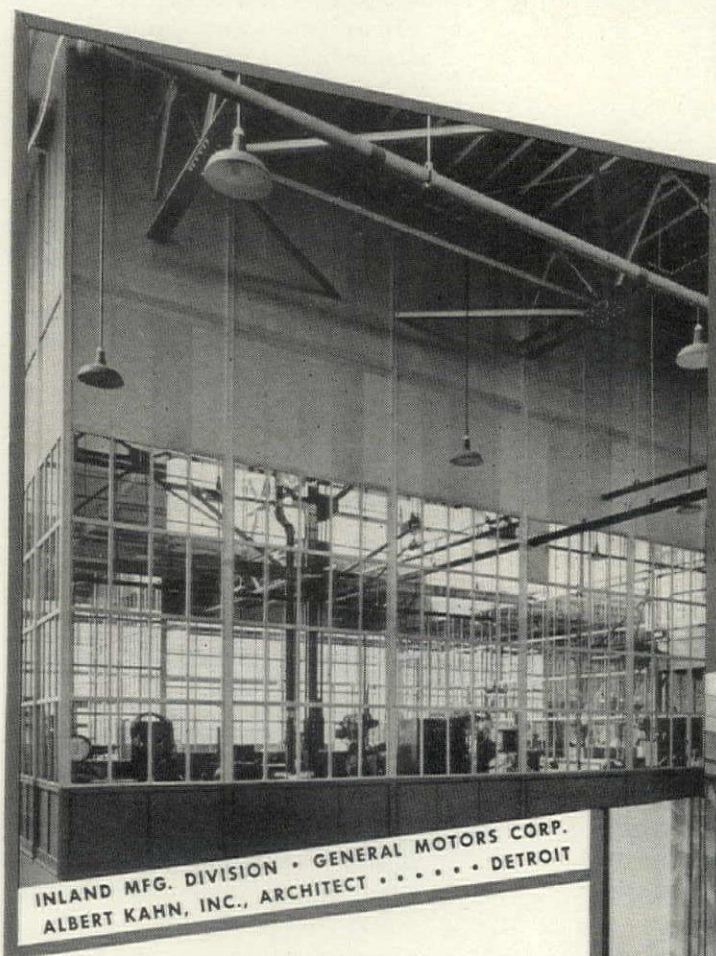
(Continued on page 174)

Worth Watching!

New developments in Movable Steel Partitions and Prefabricated Interiors

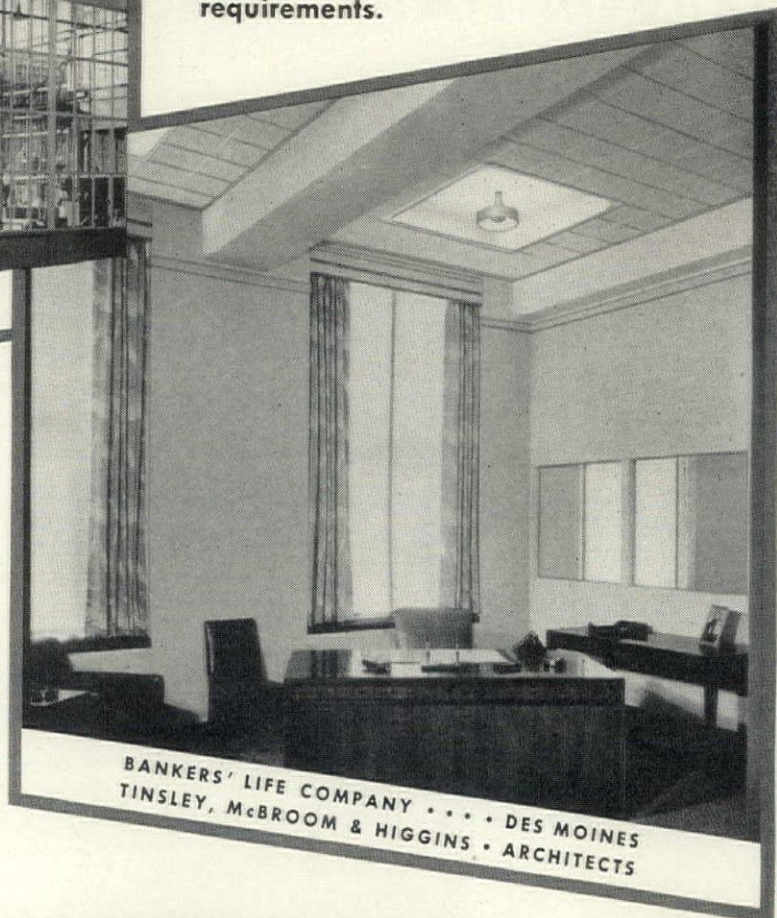
In the coming years, more than ever before, building interiors will have to be *flexible* so that they may be quickly and economically rearranged to meet ever-changing conditions.

HAUSERMAN MASTERWALLS are the means by which architects create ideally flexible industrial and office interiors. These prefabricated, prefinished wall units are designed to fulfill a wide range of acoustic, lighting, and decorative requirements.



INLAND MFG. DIVISION • GENERAL MOTORS CORP.
ALBERT KAHN, INC., ARCHITECT DETROIT

During the war, while engaged in marine and aircraft production, we have been able to review at arm's length our long series of developments in the partition field. With a fresh approach, and with new techniques we have learned, we are ready to consult with architects on the best means of utilizing prefabricated steel interiors in new building plans.

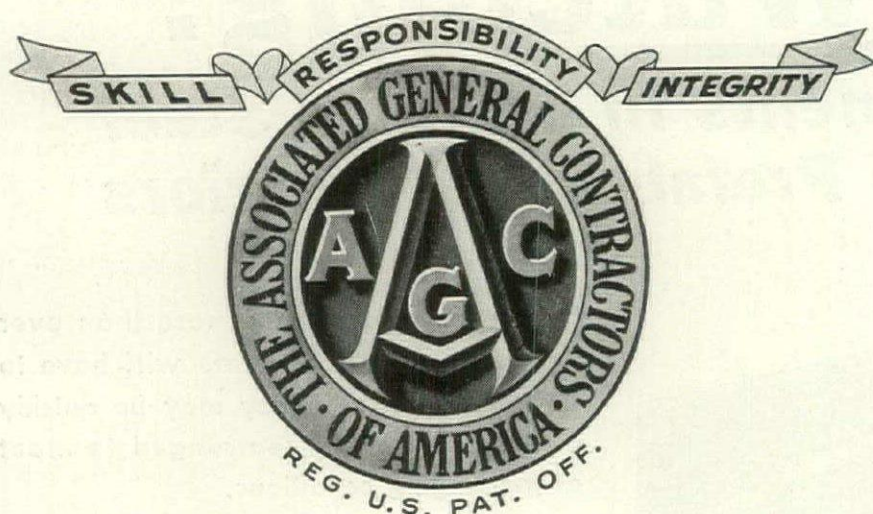


BANKERS' LIFE COMPANY DES MOINES
TINSLEY, McBROOM & HIGGINS • ARCHITECTS

HAUSERMAN

*31 Years of
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THE E. F. HAUSERMAN COMPANY, CLEVELAND 5, OHIO — BRANCHES IN PRINCIPAL CITIES



WHEN YOU CONSTRUCT THIS SYMBOL IS YOUR ASSURANCE OF SKILL—INTEGRITY—RESPONSIBILITY

For twenty-five years the Associated General Contractors of America, through its chapters, branches and individual members has been recognized as the organization whose membership is made up of the leading general contractors of America.

When you build it is to your distinct advantage to select a general contractor who is a member of the A.G.C. You can know that you are dealing with an individual and an organization who has qualified in many ways to give you the utmost in ability and reliability—to produce a finished structure to your satisfaction at a guaranteed specified time and cost.

This is blue print time. Call in a general contractor who is a member of the A.G.C.

THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC.

NINETY CHAPTERS AND BRANCHES THROUGHOUT THE COUNTRY
NATIONAL HEADQUARTERS—MUNSEY BLDG., WASHINGTON, D. C.

Skill, Integrity and Responsibility in the Construction of Buildings, Highways, Railroads and Public Works

MONTH IN BUILDING

(Continued from page 172)

"New houses must be placed on the site in a way that will permit the greatest amount of direct sunlight in the rooms. Houses must be set back at least 35 feet from the center of the street. . . . The total glassed area of the windows of a room must be at least one-tenth the floor area."

Home owners may borrow from the local authorities an amount which, with the grant, is equal to 83 per cent of the market value of the property. Loans are repayable in 35 years. Charges and other outlays amount to much less than rent for similar accommodations.

Switzerland, facing a serious housing shortage after World War I, sought to encourage private building both by the purchase of second mortgages and by direct subsidies to builders. In 1926, 22 per cent of all new dwellings were built by private builders with subsidy aid. Use of subsidy declined, however, and in 1938 only 1.2 per cent of new dwellings had such help. Exploring in the inter-war period many other types of public aid to private housing enterprise, Switzerland turned again to direct subsidy as a means of stimulating private construction to meet the housing shortage born of World War II. Other types of housing aid used:

- ▶ Rent subsidies to families with many children.
- ▶ Low-interest loans for home repair.
- ▶ Loans used for purchase of second mortgages covering rebuilding operations in slum areas in older cities.
- ▶ Sale of government-owned building sites at prices below market value.
- ▶ Exemption from municipal taxes for low cost dwellings, offered by the canton of Tezzina.

Switzerland's wartime housing subsidies are offered only in areas where housing demand is greater than supply. Subsidy priority is given to houses built for families with at least three children and to those requiring the least amount of critical materials.* To check speculation, the owner of a house built with subsidy aid must repay the subsidy if he sells the house at a profit. The federal government pays 5 per cent of construction cost on houses built by private builders; the cantonal government pays a subsidy twice as large. When a municipal authority or cooperative building society builds the house, the federal government pays a 10 per cent subsidy; the cantonal government matches this. Maximum costs per room are stipulated by the government.

* In Switzerland, these are iron, cement, sanitary equipment and electric installations.

FRESNO CITY HALL

BREAKS WITH TRADITION

**...with a Design
of the future**



A Tri-zone Air Conditioning System is an Unusual Feature

THE ULTRA-MODERN structure shown here is the seat of city government in Fresno, California. This clean-cut building is a distinguished example of tomorrow's thinking in today's design, and presents a dramatic departure from the usual ornate style of architecture traditionally employed in municipal buildings of this character. Erected in 1941 and completely air conditioned, it reflects the trend toward public structures combining comfort and livability with functional efficiency and symmetrical beauty.

The air conditioning installation, which uses a "Freon" refrigerant, is of 70 tons capacity, adequate for the average of 325 people occupying this building of 385,000 cubic feet. The system is laid out in three independently controlled zones . . . the lobby, the offices with north exposure and the offi-



Looking down the ramp in the center of the two-story lobby toward glassed-in front entrance.

ces with south exposure. This scheme equalizes differences in temperature resulting from the variations in exposure.

With air conditioning playing an increasingly important part in the architecture of tomorrow, you will find it helpful to build your

own reference file of current air conditioning facts. Why not write today for complete data on "Freon" safe refrigerants? Address:

Kinetic Chemicals, Inc., 10th and Market Streets, Wilmington 98, Delaware.

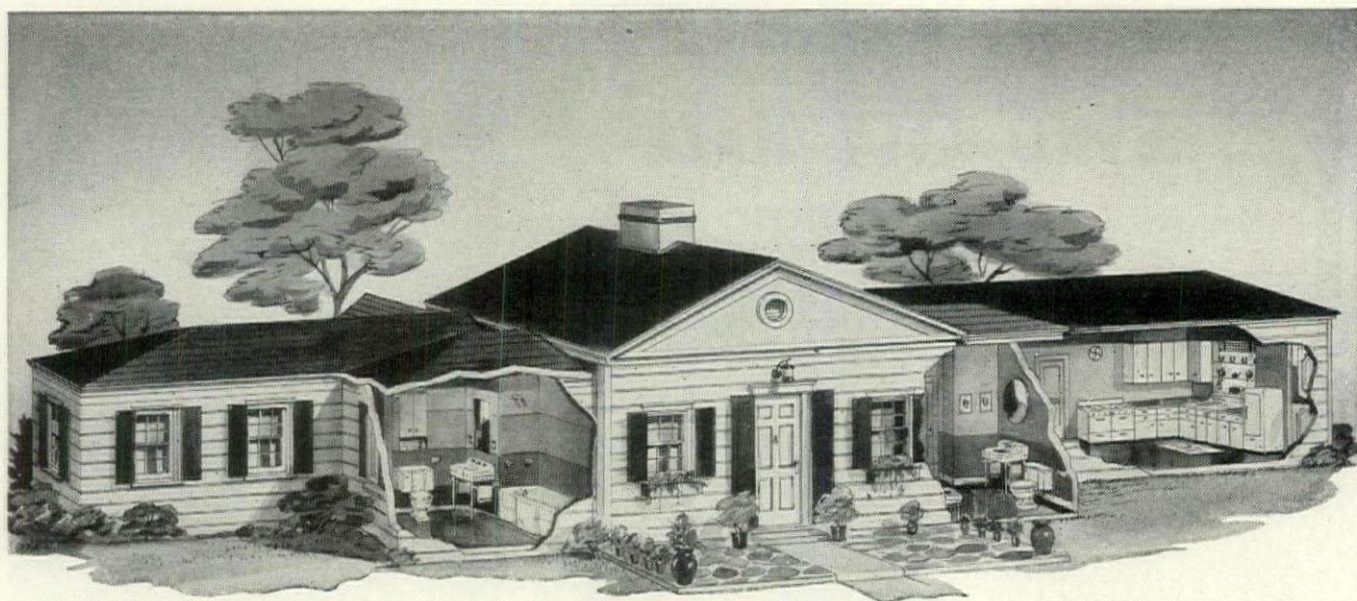


FREON *safe refrigerants*

REG. U. S. PAT. OFF.

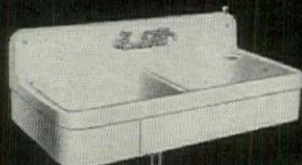
"Freon" is Kinetic's registered trade mark for its fluorine refrigerants.

BUY A WAR BOND EVERY MONTH



Crane BATHROOMS AND KITCHENS CAN HELP YOU SELL MORE HOMES

EQUIPMENT AVAILABLE NOW



CE 19-563 COTTAGE SINK



CE 597-V NORWICH
LAVATORY



CE 11-004 HANOVER CLOSET



CE 3015 CONSERVOR BATHTUB

AMERICA has been on a starvation diet of new homes since 1941. Surveys show that one of the things uppermost in the minds of Mr. and Mrs. America today is home ownership. They have the money to satisfy this desire as soon as home construction is possible.

Crane bathrooms and kitchens can be strong selling arguments for the homes you are planning to meet this market. Whether you expect to build simple Cape Cod bungalows or homes in the upper brackets—you will find in the complete Crane line of tomorrow, fixtures at every price range to suit every requirement.

Mr. and Mrs. America—who expect a better postwar home—have expressed a preference for Crane plumbing fixtures. Why not put this recognition of Crane quality to work in your homes? . . . it will increase sales value and help you sell more homes.

For today's essential construction, Crane has developed a line of quality fixtures made largely of non-critical materials. These are available now—without priority. Talk to your plumbing contractor or call your Crane Branch.

CRANE

CRANE CO., GENERAL OFFICES:
836 S. MICHIGAN AVENUE, CHICAGO 5
VALVES • FITTINGS • PIPE
PLUMBING • HEATING • PUMPS

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS



"What goes on here?"

A FAIR question, thinks little Oswald, for his reputation as a host is at stake.

"Looks like we're serving *soup*—for dessert!" says he, worried about the end of a perfect party . . .

Naturally, his mother blames it all on the refrigerator. But she's wrong. The trouble really lies in the antiquated wiring circuits in the Bjones kitchen.

You see, everything but the kitchen stove is hooked onto the *same circuit* that serves the refrigerator!

As a result, the circuit is overloaded and all appliances connected to it operate ineffectively. The refrigerator motor, for example, fails to come up to proper speed and the protective device shuts it off to prevent damage to the

motor. Consequently, the refrigerator doesn't keep the ice cream hard.

Overload in home wiring also reduces lighting efficiency—slows down cooking—runs up the monthly electric bill.

• • •

The Westinghouse Better Homes Department was created to help improve home wiring practices—not only in the construction of 194X homes but in the modernization of existing homes, as well.

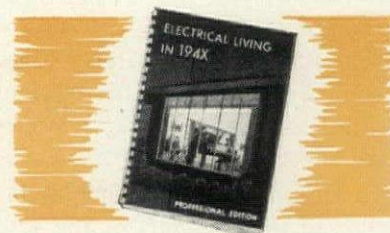
Now, while homes of the future are still in the planning stage, why not refer your *electrical problems* to our housing specialists who will gladly give you authentic information on such subjects as—

Selection of electrical equipment.

Arrangement of electrical equipment for proper sequence of operation.

Sizing of wiring, water supply, and drainage lines for electrical equipment.

Location of convenience outlets, lighting outlets and controls.



"Electrical Living in 194X" will help you explain the urgent need for "better wiring for better living" to prospects for home modernization and for new homes.

To get your free copy, write Better Homes Department (AF-104), Westinghouse Electric & Mfg. Co., Pittsburgh 30, Pa.

Westinghouse

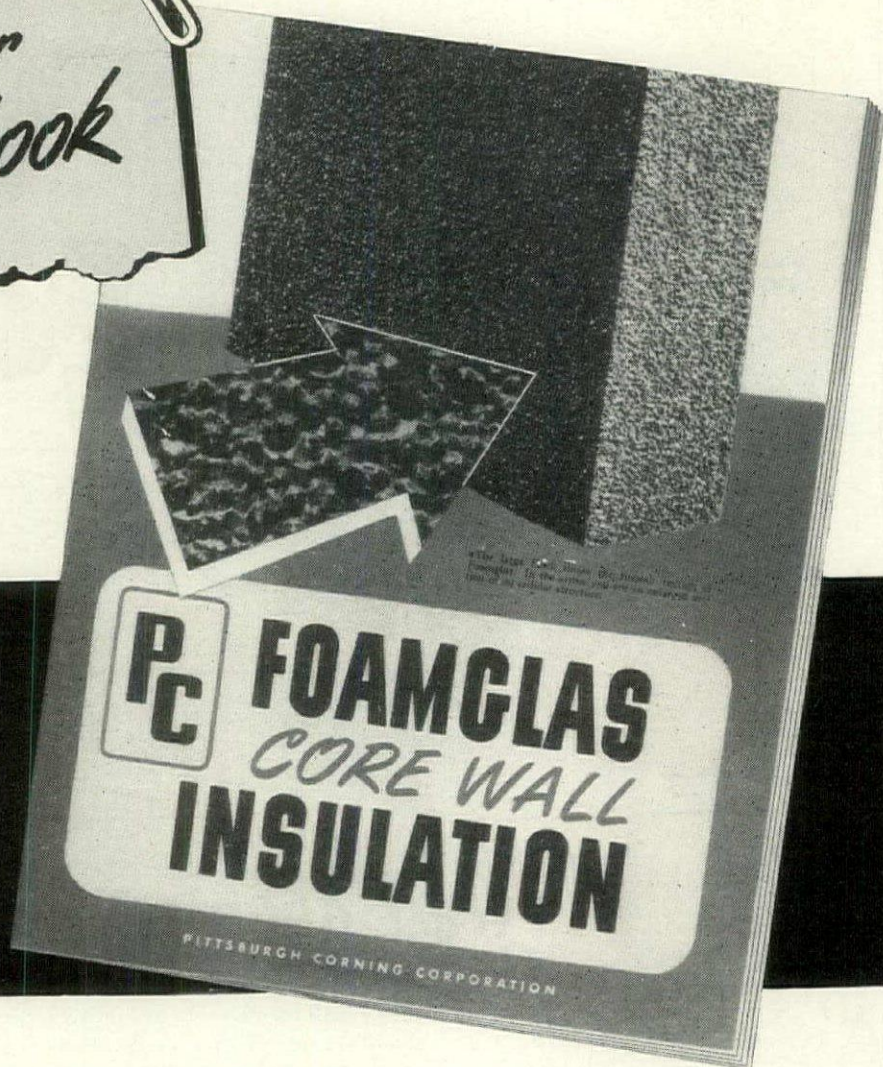
Plants in 25 Cities Offices Everywhere

TUNE IN: John Charles Thomas, Sunday 2:30, EWT, NBC . . . Ted Malone, Monday, Wednesday, Friday 10:15 pm, EWT, Blue Network



**IT'S
FREE**

It contains complete information on PC Foamglas the permanent insulation for cored walls that becomes an integral part of the wall.



ARCHITECTS will find, in this new brochure, complete engineering data—charts, tables and explanatory text—all the information needed by men who plan efficient insulation—and keep a sharp eye on costs.

In core walls, PC Foamglas becomes an integral part of the wall structure when tied in to brick or other backing and facing. It does not

pack down, swell, shrink, warp or rot. Being glass, it does not deteriorate, is an efficient vapor-seal and water-stop as well as a permanent insulation. It helps to control temperature and humidity—to prevent condensation.

The same qualities that make PC Foamglas the ideal insulation for core walls have won it general acceptance for use in duct work, floors,

and roofs in many types of industrial plants.

When your plans include insulation problems, our specialists will be glad to consult with you on the most advantageous use of PC Foamglas. Meanwhile, fill in and mail the convenient coupon and your copy of the new booklet, "PC Foamglas Core Wall Insulation" will be sent to you without charge or obligation.



PC FOAMGLAS

T. M. REG. U. S. PAT. OFF.

*Vaporproof
Water-repellant*
INSULATION

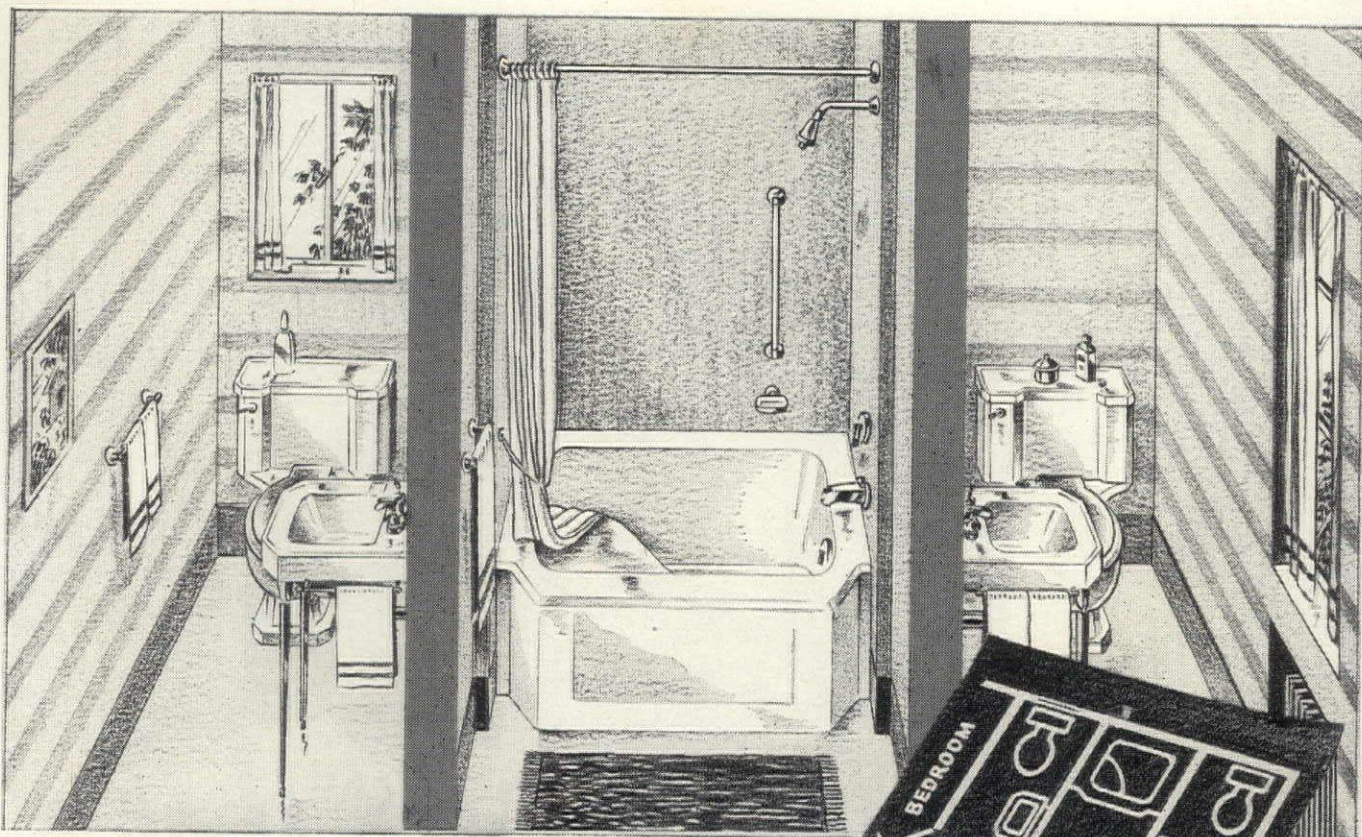
MAIL COUPON TODAY

Pittsburgh Corning Corporation
2302-4 Grant Bldg., Pittsburgh 19, Pa.
Please send along my free copy of
your new booklet on PC Foamglas
Insulation.

Name

Address

City State



BATHROOM SPACE will do double duty in tomorrow's homes

KOHLER is interested in post-war trends in plumbing planning for both new and remodeled homes.

Shown above is a combined bathroom-lavette which offers the advantages of two complete bathrooms and two lavettes. Grouping of the fixtures is planned to save floor space and for economical piping. Entrance can be made either from the bedroom or hall.

A built-in linen closet serves the three units. Cabinets behind lavatory mirrors, and built-in shelves in the lavettes, provide storage space for towels, wash cloths, soap and accessories.

Note the towel bars on lavatories and the grab rail over the tub.

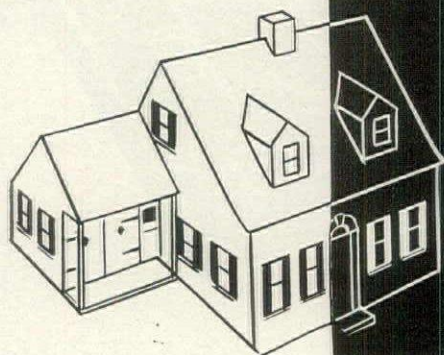
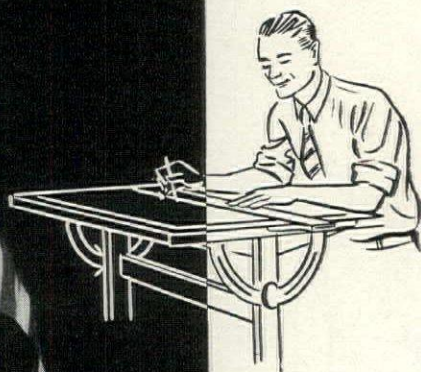
Fixtures include the 4x4' Times Square bath, with Triton mixer showering fitting, Integra one-piece siphon jet closets and Jamestown vitreous china lavatories, with compact mixer fittings, metal legs and towel bars.

Kohler is most anxious to co-operate with architects and builders in considering ideas for tomorrow's homes. Write: Kohler Co., Dept. AF-10, Kohler, Wisconsin.

★ BUY UNITED STATES WAR BONDS ★

KOHLER OF KOHLER

PLUMBING FIXTURES AND FITTINGS • HEATING EQUIPMENT • ELECTRIC PLANTS



YOU CAN
Expect More
FROM
OIL-O-MATIC

Today's aviation headlines promise better home heating for your clients tomorrow. Because the modern refining methods which produce *super-power* high octane gasoline also yield heating oils of *higher heat power* per gallon. These oils burn with a hotter flame—a flame which reaches new high temperatures and new peak efficiencies in smaller space than that required for burning pre-war oils. Intensified, *concentrated* combustion of this type permits, *in fact demands*, new overall compactness in oil heating systems. Thus, these new oils make product engineering all-important.

Just as aviation engineers have designed and built more efficient engines to fully utilize the advantages of high octane gas, so must oil heating

engineering keep pace with oil refining advances. Ordinary oil burners will miss the increased heat potential in tomorrow's hotter-burning oils. Tomorrow—as for a quarter of a century—Oil-O-Matic heating products will be *completely engineered and precision-built*. They will take full advantage of the *extra heat power* in these new oils.

Oil-O-Matic engineering experience and know-how will give Oil-O-Matic products exclusive mechanical advantages. Precise adjustments will make it possible to meet individual heating requirements with an amazing degree of accuracy. For time-proved engineering to bring the benefits of modern refining to your clients' automatic heating... you can expect *more* from Oil-O-Matic.

WILLIAMS
OIL-O-MATIC
HEATING



WILLIAMS OIL-O-MATIC
BLOOMINGTON

HEATING CORPORATION
ILLINOIS



NOTHING TO SIT ON...



...IS SO RESTFUL AS FOAMEX*

In these pictures you see America making an important discovery.

Every day, thousands of people are discovering the restfulness of foamed latex.

They're sitting and sleeping on it—in trains, buses, planes, hotels, hospitals and homes from coast to coast.

They're finding out this modern mattress and furniture cushioning makes better sense.

It floats you to blissful relaxation on millions of air-breathing cells. Molds itself to your form, never molds *you* out of shape because it never packs hard under weight.

It's cooler, more sanitary, because it breathes and airs itself constantly.

It replaces springs and stuffing with one molded, sag-proof material. That means it simplifies all upholstered furniture, makes space-saving built-in furniture a cinch to construct.

All our foamed latex production is strictly military today. But while making it for war, we're improving it for peace. Firestone's perfected foamed latex cushioning is called *Foamex*.*

P.S. Watch for *Velon*,* Firestone's upholstery and drapery fabric. Makes smarter colors practical, indoors and out.

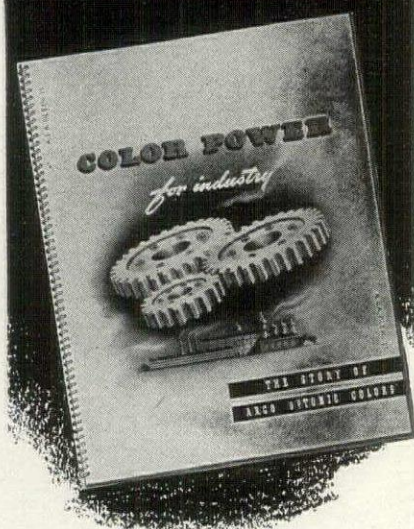
*TRADEMARK

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Firestone

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THE NEW SCIENCE
that puts
COLOR POWER
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SEND FOR THIS BOOKLET

It contains the full story of a new development in the practical, functional use of color in industry ... outlines the new science of OPTONICS. A note on your business letterhead will bring you a copy of "Color Power for Industry" by return mail with our compliments.

THE ARCO COMPANY
CLEVELAND, OHIO • LOS ANGELES, CALIF.



LETTERS

(Continued from page 36)

little or nothing and the FORUM has emerged as one of the largest, if not the largest interests I have in the postwar existence we all hope for. I loan my copies and am keeping a card file so that I will get them back. I read and reread those I have. I watch carefully the careers of the men in the profession I have had the pleasure of knowing—Fred Keck, Bill Pereira, Bill Kaeser, and Chuck Luckman (who owns Bob Hope). One can still get lost for a while in detailing a new design for a kitchen cabinet or a bookcase or a railing. May I congratulate you all on keeping your perspective in these times?

Sgt. R. F. ALLEN
Fort McIntosh, Texas

Forum:

Sitting here in a foxhole somewhere in France with an issue of your ARCHITECTURAL FORUM in my hands, it takes my mind off the everyday existence of fighting this war. It is the only tie I have in my present life with my prewar profession.

I can't help thinking how many changes in architecture must be taking place in the States, which I would be absolutely ignorant of except for your magazine. It has therefore meant a great deal to me from month to month.

Hoping for a speedy conclusion of the war when I will once again be a civilian subscriber.

ARTHUR W. ISAKSON
c/o Postmaster, New York

HORNBOSTEL REHASH

Forum:

In both THE FORUM and the Record appears a sketch by Mr. Hornbostel which arouses the hostility or some such on the part of Lt. Sidney N. Shurcliff, U.S.N.R. in the July FORUM. Is this a private fight or can anybody get in?

Even as a landlubber and far from the ocean, may I also chuckle over the anchored and moored ships although I saw a man today wearing both belt and suspenders.

The Lieutenant's criticism is well taken about the lack of turning space and the helicopter and the bat-wing jobs and the intrusion of the control tower. However, even before 1941 I saw a warehouseman unloading a double parked freight car without a tug by the simple expedient of trucking through the doors of the car adjacent to the dock.

If the Lieutenant had ever made a drawing like this he might well have drawn it upon tracing paper, turned it face downward on a sheet of bristol

(Continued on page 186)

ABESTO
ASSURES
BETTER ROOFS
AT A SAVING

**GOOD DESIGNERS MAKE
AND USE PRACTICAL
IDEAS—**

Our idea years ago was that a good cold application would give the built-up roof construction and recoat field a then new, but completely practical method.

ABESTO COLD PROCESS Roofing materials were developed and have proved their quality and efficiency now beyond question.

ABESTO is tops in the three qualities that are essential to a good roofing material—(1) adhesion for close, tight bonding of the laminations in built-up work, (2) elasticity when cured to allow for the temperature expansion and contraction of the roof without cracking or checking, and (3) a high resistance to oxidation to give long life to the roof.

ABESTO COLD PROCESS increases the efficiency of roof work by eliminating heating equipment investment, double handling on the job, and gives marked savings in time and labor.

Write for our free specifications which show the various types of construction for which Abesto is used.



**ABESTO MANUFACTURING
COMPANY**

134 Wabach Street
Michigan City, Indiana

LOOK TO CARDOX



for cooperation in planning
**MODERN
FIRE PROTECTION**

Architects now developing post-war building plans are invited to draw on the CARDOX Engineering Staff for practical cooperation in analyzing fire protection needs . . . and in planning fire extinguishing facilities *engineered for the specific hazards they cover.*

Advantages of Cardox Engineered Fire Protection

Through Cardox methods of control and engineered application, a Cardox System extinguishes fires and cools out fire zones and combustibles by mass discharge at high rate of flow of pounds or tons of non-damaging, non-contaminating Cardox CO₂. Control may be fully automatic, manual, or a combination of the two. Automatic systems include actuation by heat detectors, pre-discharge alarm, release of doors and windows, shut down of fans and motors and essential related functions.

Uniform, Enhanced Extinguishing Performance

Carbon dioxide, one of the fastest of all fire extinguishing mediums is

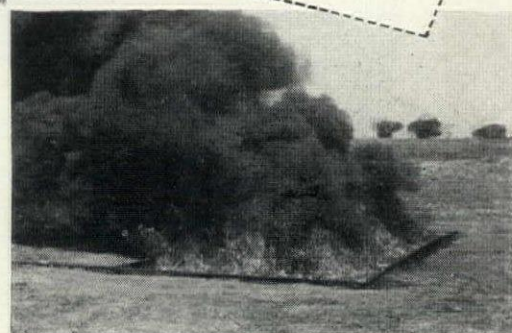
given uniform, enhanced performance by the Cardox method of control and application. For example, Cardox CO₂ has uniform extinguishing characteristics regardless of plant or atmospheric temperatures; its high CO₂ snow yield provides increased cooling effect (carbon dioxide released at 0°F. yields 45% CO₂ snow) and, because of high CO₂ snow yield and special engineering of Cardox nozzle, accurate projection is achieved through relatively great distances.

Write on business letterhead for Bulletin 6104 containing Cardox Fire Extinguishing Systems data of special interest to architects.

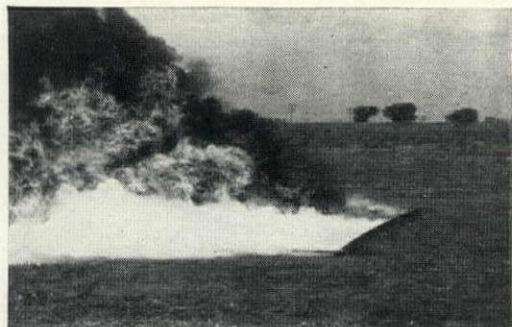
CARDOX CORPORATION

BELL BUILDING • CHICAGO 1, ILLINOIS
New York • Boston • Washington
Detroit • Cleveland • Atlanta • Pittsburgh
San Francisco • Los Angeles • Seattle

BUY WAR BONDS



In this demonstration of the speed and efficiency of a Cardox Fire Extinguishing System under extreme conditions, 100 gallons of quenching oil, primed with gasoline, was allowed to burn long enough to develop maximum burning rate and heat.



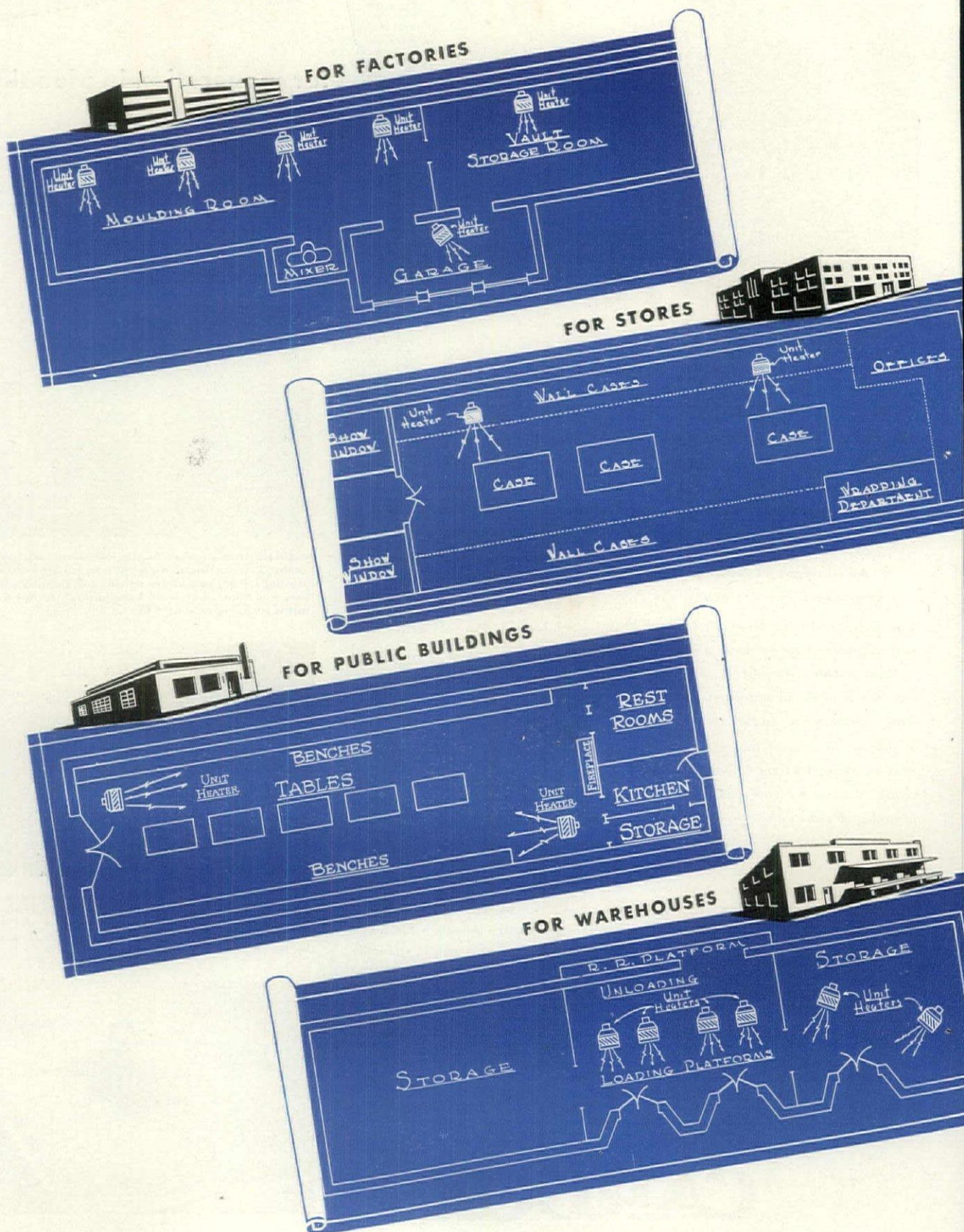
At the height of the burning period a mass discharge of Cardox CO₂ was applied from fixed linear nozzles on two sides of the 10'x20' test pool. Note in picture above how the mass discharge of Cardox CO₂ is enveloping the fire zone.



Complete extinguishment and cooling below re-ignition temperature was accomplished in total discharge time of 33 seconds. Note CO₂ snow on oil surface.



How to make the



best use of clean Gas Heat

JANITROL Gas Fired Unit Heaters first attained their leadership by supplying quick, clean, automatic heat in "hard-to-heat" places . . . places where larger, more expensive equipment couldn't be used.

Because these units performed so satisfactorily and installations were so simple and inexpensive, alert heating men were quick to utilize these flexible, self-contained units for more and more types of applications instead of bulky, often time, complicated systems.

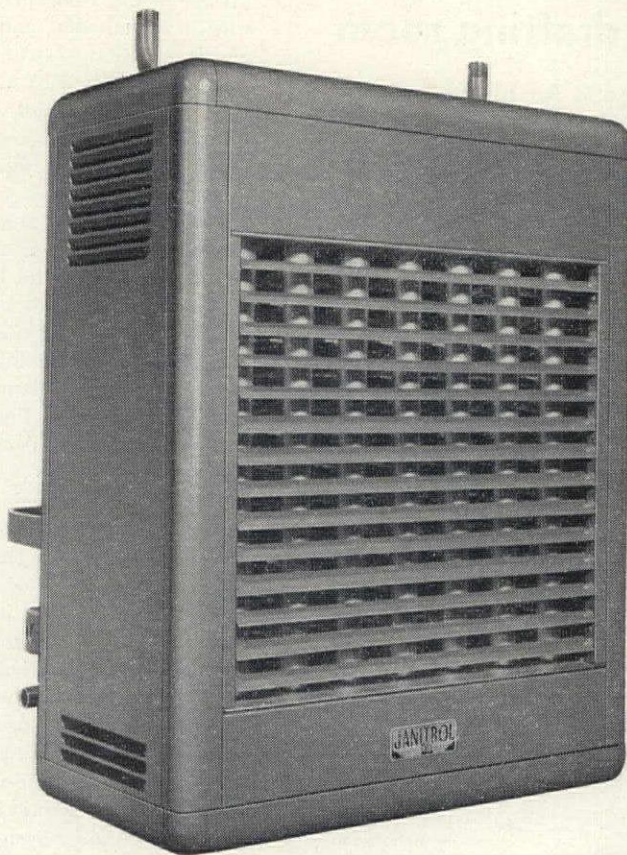
New type Janitrol Unit Heaters incorporating many exclusive features, improved design and operation had "arrived" just before the outbreak of war. No other unit heater combines *all* the advantages that Surface Combustion gas experts have engineered into Janitrol equipment.

Records of satisfied users, including some of the country's largest manufacturers, down to the small store operator, reveal astonish-

ing low operating costs, with fuel savings ranging as much as 25%.

If you want economical heat, directed where it will be most useful; the complete unit suspended out of the way, requiring no valuable floor space, for a beauty salon or steel foundry, there's a type of Janitrol unit ideally suited to meet the B.t.u. requirements.

Write today for complete specification data and delivery information.—Surface Combustion, Toledo 1, Ohio.



**SPECIFY
PROVEN
PERFORMANCE**

JANITROL
Gas Fired

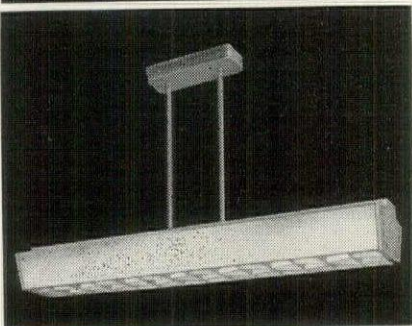
FURNACES and HEATING UNITS

The complete line of Janitrol Unit Heaters meets every heating requirement ranging from 50,000 to 1,250,000 Btu. input.

Suspension units are equipped with either propeller fans or powerful centrifugal fans. Other models are specially designed for duct installations.

Heavy Duty Floor Mounted models are ideally suited for many industrial uses requiring input ratings of 250,000 up to 1,750,000 Btu.

MODERN LIGHT for Modernization ...the new **BEACON**



Effective for office or drafting room

Designed for high quality fluorescent lighting at lower cost, the BEACON is especially good for lighting essential offices or drafting rooms. Postwar, it can be a decided help in stores and other commercial interiors. Provides pleasing, smooth, shadowless light to help handle paper work faster and reduce eyestrain.

Maintenance is easy; no horizontal surfaces on which dust can collect. New rigid design louvers are hinged to simplify lamp replacement. Etched, ribbed glass on the side panels gives smooth, pleasing light; louvers diffuse down-light.

Available in stem suspension or close-up mounting for low-ceiling areas. See our catalog in Sweet's for details, or write us.



For 194X you can count on lighting fixtures by Wakefield... confident that they will incorporate all the latest developments of lighting research and engineering.

THE **WAKEFIELD** BRASS
F. W. CO.
VERMILION, OHIO

LETTERS

(Continued from page 182)

board and rubbed it with a coin, imprinting the lines for the final drawing but incidentally anglicizing the traffic.

There's one thing, however, that all hands seem to have overlooked. Up to 1944 no device has been perfected (unless it's a well guarded military secret) to rotate the wheels of a landing aircraft to synchronize with the landing speed of the ship. Most ships now land with the wheels standing still and suddenly with a smoking scream taking on a peripheral speed of 100 miles an hour which would raise the very devil even with a Barret roof.

Or do you plan on having 8" of concrete on top of it?

A. M. ATKINSON

New York City

HANDS ACROSS THE OCEAN

Forum:

I am writing to congratulate you on your excellent series of articles named "Horse Sense Planning." THE FORUM with its usual vital and farseeing articles is a constant joy to me as I am now a member of the R.A.F. and have little time for the study of architecture, especially interior decoration and landscape architecture which interest me most.

Over here, large areas are to be re-planned and the ideas are confused and vague as yet, but the bold steps taken in New York are most stimulating and it is a joy to know that there are two great cities, fired with ambition, determined not to sit on their laurels, and with a keen eye to modern lines without being soulless and grim. They are Stockholm and New York.

New York, so fine in its new conceptions and so sure of what developments to improve on, is perhaps the most interesting city for us over here to watch.

Often I have heard it said how much the city would be improved by tree-lined streets in some districts. Doubtless the subways being near the surface present a problem for tree development, but I saw two excellent examples in your "Horse Sense Planning" article—both on Manhattan. Would it not be possible for Park Avenue, even though laid out over the Grand Central tracks to be tree-lined? A row down the edge of the pavements and some in the center parts would give this dour though dignified Avenue a far softer and more human look, and so create an almost ideal mixture of urban development and landscape architecture.

There are obviously laws governing the trees allowed in the city streets, but

(Continued on page 190)

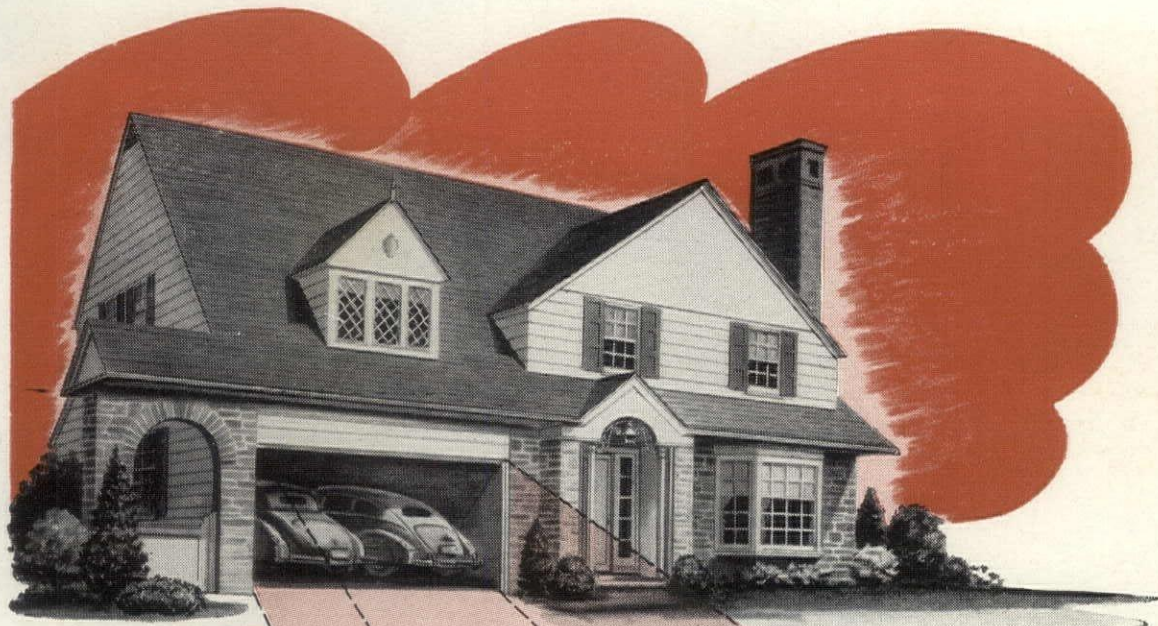


ANOTHER
FAMOUS
PENAL
INSTITUTION
INSTALLS

Stewart JAIL and PRISON
EQUIPMENT

One of the most outstanding Stewart installations is the new Criminal Courts Building and City Jail, Borough of Manhattan, New York City—the largest municipal place of detention in the world. Associate architects were Harvey Wiley Corbett and Charles B. Meyers. ¶ Although the facilities of the Stewart organization are engaged in war work, it's not too early to be getting your plans for future jail and prison construction into shape. With this in mind, architects are cordially invited to avail themselves of the technical facilities of our prison department. Complete information on any project from a village lockup to a federal penitentiary will be furnished without cost or obligation.

THE **STEWART** IRON WORKS COMPANY
INCORPORATED
1165 Stewart Block, CINCINNATI 1, OHIO



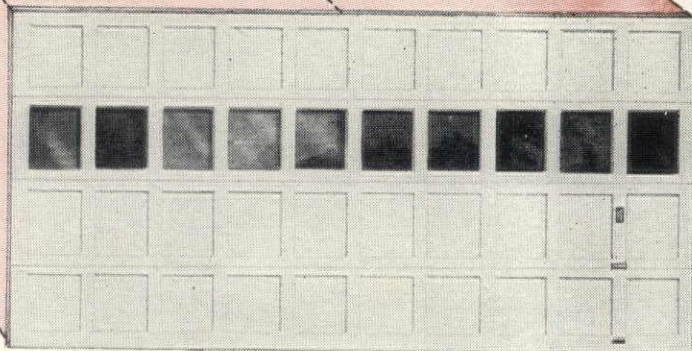
Here is a standard Crawford Door—full width for two-car garage. Fits pleasantly, unobtrusively into many architectural styles. Its basically good design is supplemented by durability and ease of operation. Engineered by Crawford specifically for two-car opening. Glass area may be wood panels if desired.

on the
"HOME FRONT"
of
TOMORROW...

Crawford

UPWARD - ACTING
DOORS

Residential Garage Doors
Commercial & Industrial Doors
Hand or Power Operated Doors
★ **Craw-Fir Doors** ★

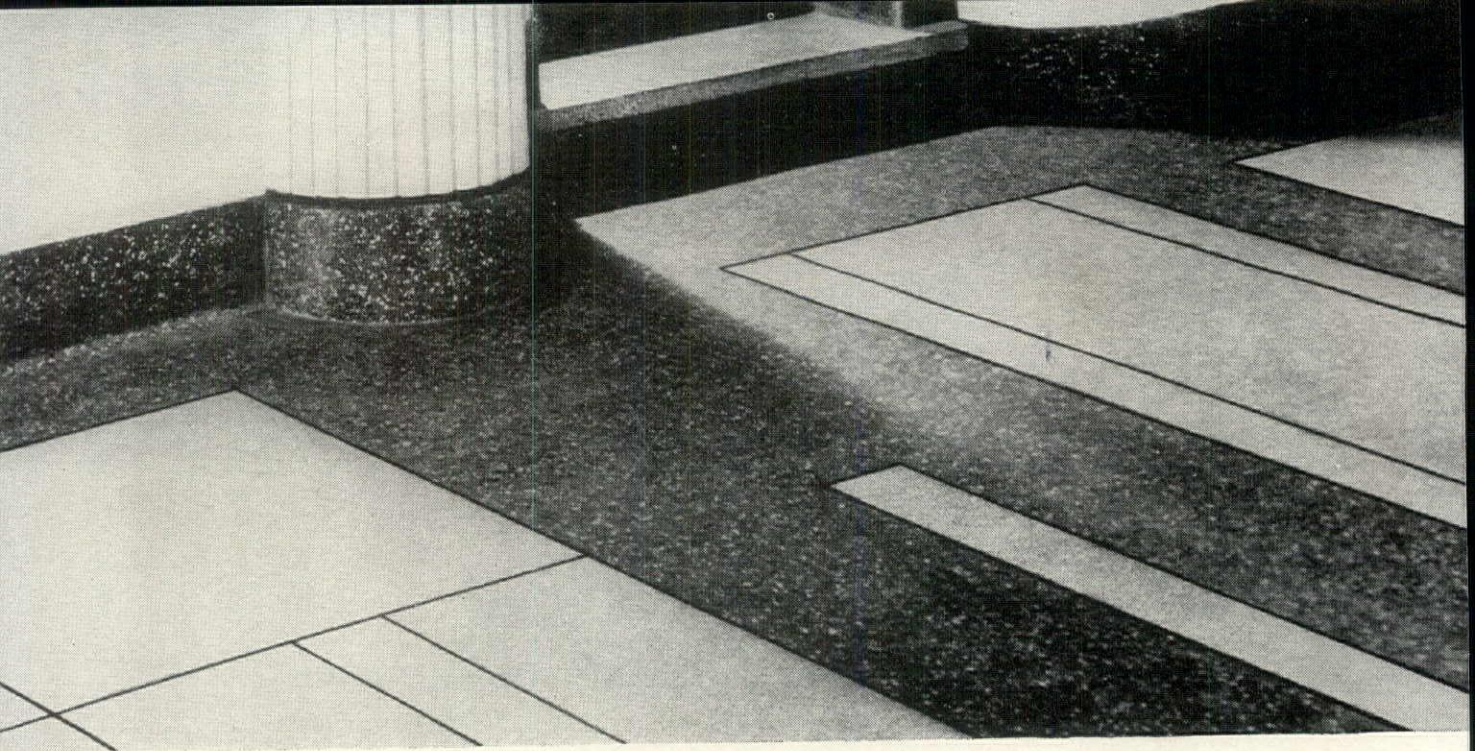


What will the new postwar home look like? We've seen many conjectures, some far-fetched and fanciful, but, being realistic about such matters, our slant is that there will be no startling revolutions. The pleasant and familiar styles—American Colonial and Farmhouse, French Provincial and the English Countryhouse—are too well liked to disappear overnight.

And, so, as we project our engineering plans for new postwar Crawford Doors, we remember that many of them will be required to fit into the graceful styles that wear so well.

Naturally, we are exploring new materials and new techniques and in this we are inspired by our success in converting our entire production to the making of important, high-precision aviation parts. When we re-convert, we will take advantage of every new idea that proves its merit on the basis of improving the quality, appearance and performance of our product.

As always, our first objective is to produce superlatively fine, good-looking, easy-operating doors. It is not too early, now, for you to correspond with us concerning *your* postwar door needs. Your inquiry will be given our immediate attention. Crawford Door Company, 401 St. Jean, Detroit 14, Mich.



Floor Show...starring **TENITE** an Eastman Plastic



Tenite strips extruded by Extruded Plastics, Inc., for Manhattan Terrazzo Brass Co.

COLORFUL TENITE in the form of terrazzo trim is used to create striking floor patterns. The strips can be made in any color and are resilient enough to be formed to any pattern.

Since the introduction of Tenite divider strips for terrazzo floors three years ago, more than three-quarters of a million feet have been installed — in naval hospitals, veterans' hospitals, schools, government buildings, and cafeterias. In addition, Tenite strips are used extensively in flooring of magnesite composition. The plastic withstands the constant abrasion to which it is subjected without signs of wear or discoloration.

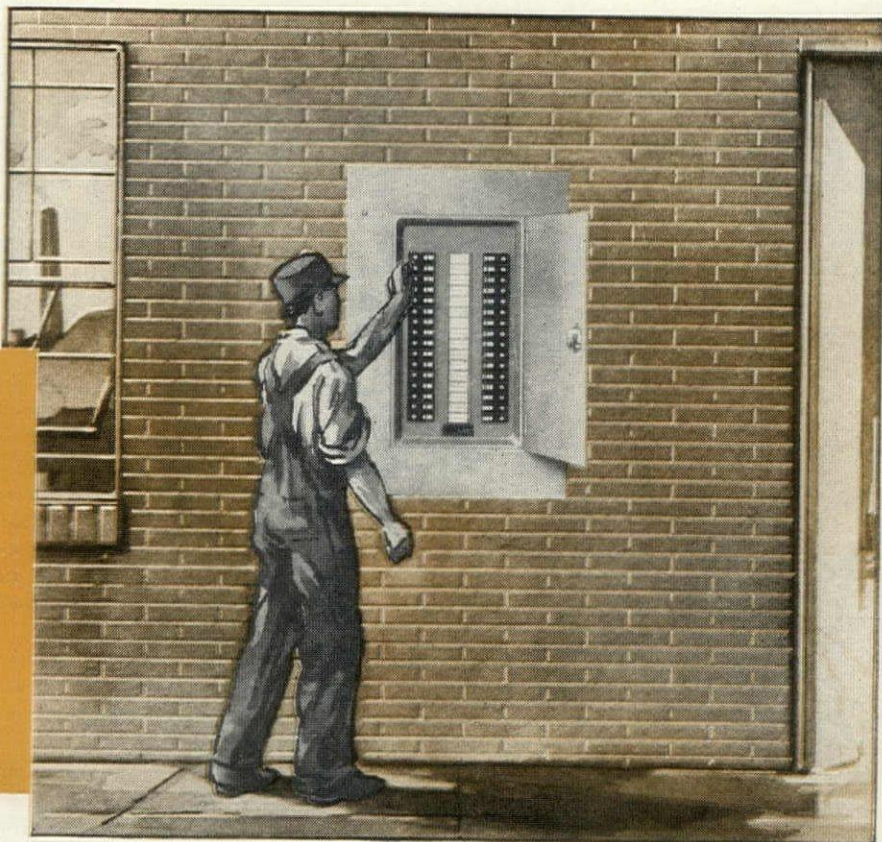
Tenite is used for many articles of building hardware which were formerly made only of metals, wood, or glass. Such products as thresholds, linoleum trim, door knobs and handles, piano-type hinges, plumbing fixtures, and piping demonstrate the importance of Tenite as a basic raw material in the building industry.

Tennessee Eastman Corporation

(Subsidiary of Eastman Kodak Company)

Kingsport, Tennessee

Both
PERSONNEL
and
WIRING
SYSTEM
are
PROTECTED



SAFETY is a prime factor in the construction of **Type AC THERMAG CIRCUIT BREAKER PANELBOARDS**

All current-carrying parts are permanently covered—careless hands can't touch them... Needless circuit interruptions are prevented when harmless, momentary overloads occur—but the circuit breakers "trip" on short circuit or harmful, sustained overload... These circuit breakers are operated like an ordinary tumbler switch. Simply return the handle to the ON position when the cause of the short circuit or overload has been removed.

They afford modern protection with ease of operation, and are built for long life—these circuit breakers are Underwriters' Laboratories tested for ten thousand complete operations.

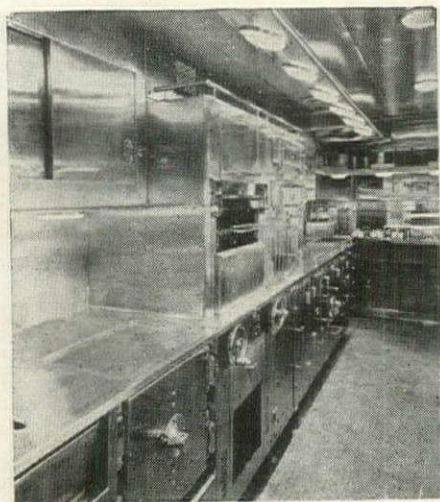
The cabinets are designed with ample gutter space and plenty of knockouts to expedite installation. Ⓐ Pressure Type (Solderless) Connectors on mains facilitate connection.

Ⓐ Type AC Thermag Circuit Breakers are assembled in Panelboards of 4 to 42 branches, for light and appliance service, in standard, narrow column type, and dust-tight cabinets—for either surface or flush mounting. Branch circuit capacities: 15 to 50 amperes, 120 volts AC, for 3 wire single phase or 4 wire three phase mains... Mass production of Ⓐ Panelboards is attained by the use of standardized units as component parts. This results in equipment of high efficiency at lowered cost.

Write for Bulletin 67

It contains complete descriptions, dimensions, capacities, wiring diagrams, prices and suggested specifications. You'll find it helpful... Frank Adam Electric Company, Box 357, St. Louis 3, Mo.

Frank Adam
ELECTRIC COMPANY
 ST. LOUIS



When your plans call for LARGE KITCHENS in SMALL SPACE

One of the most difficult problems of the architect is that of providing food service for large numbers of people from small kitchens. This is essentially a problem of planning. For example, the kitchen illustrated above occupies only 180 square feet of floor space but it serves 600 complete meals a day. When you have a similar problem on the boards or in prospect, take advantage of

JOHN VAN RANGE KITCHEN ENGINEERING

Beginning with your preliminary plans we will suggest a layout that will make the best possible use of the available space. We will design every unit of equipment to fit into the space provided for it without crowding and with sufficient capacity for peak loads. We will manufacture the equipment of materials subject to governmental regulations, with rounded corners and welded seams, easy to keep clean and sanitary. We will make the installation complete and ready for use, relieving your staff of innumerable annoyances and delays.

We invite inquiries from architects responsible for projects involving provision for mass feeding.

The John Van Range Co.

EQUIPMENT FOR THE PREPARATION AND SERVING OF FOOD

Branches in Principal Cities
328 EGGLESTON AVE., CINCINNATI, O.

LETTERS

(Continued from page 186)

I feel if the plane tree is allowed in London and survives our soot choked air, Manhattan could easily manage to enhance itself without such elaborate schemes as replanning, though where this is necessary we have faith in the city to change all that is evil as fast as our European cities have been forced to by the horrors of war.

Another point is 6th Ave. What city has such a golden opportunity to create a new residential or shopping street? It has Radio City, the overhead railway successfully pulled down, a new subway and a perfect stretch, leading from Bryant Park to Central Park lying between fashionable 5th Ave. and the theatrical district of 7th Ave. and Broadway.

May the FORUM keep up its high standard, and, like the country it comes from, act as a torch and a link between the pre and postwar worlds.

We appreciate all you Americans have done far more than we can ever say and not least of all, the unselfish gifts from America—the gift of hope for the future that has never died there during the most alarming depths of slump and hardship. Hope for the future has never wavered here, but so many pressing emergencies have kept it under cover and concrete plans have not yet materialized in the architectural world, though the first sounds and signs are appearing.

You have many people over here interested in FORUM and I look forward to my next copies.

COLIN WHITEHEAD

Yorkshire, England

"BUILT IN TEXAS"

Forum:

William A. Ganster said in your last month's *Letters* what I have wanted to say for a long time and what should have been sounded from the rooftops long ago—"how in hell can you do architecture if you don't draw?"

And localizing somewhat as is the license of all good Texans—in my humble opinion two-thirds of *Built in U.S.A.* selections belong somewhere else than the U.S.A. Must the selection be limited to the eastern and western seaboard with a dash of middle west thrown in? With the exception of Wright and a very few others I could pick a selection of *Built in Texas* that in my opinion would make the balance of *Built in U.S.A.* look like glorified privies.

I've seen it happen in many and various activities including football, base-

(Continued on page 194)



Oil is tight. Coal is very scarce. Government authorities say this may be our last War Winter . . . but our worst for fuel. Insulate NOW. Protect your family's health . . . save 25% or even more on fuel. Insulation soon pays for itself. Get the facts.

This is the message we are delivering to home owners in advertisements in national consumer magazines. "Insulation and Your Home" contains unbiased information on all types of insulation. We will be happy to send you a complimentary copy. The coupon is for your convenience.

USE THE
COUPON

NATIONAL
MINERAL WOOL ASSN.
Desk A.F.

1270 6th Ave., New York 20, N. Y.

Please send me "Insulation and Your Home"

NAME _____

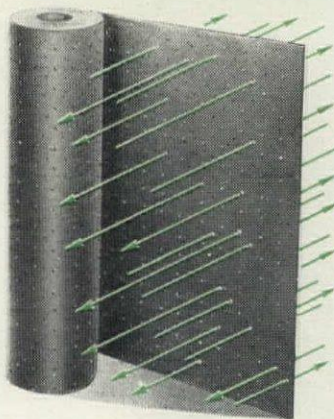
STREET _____

CITY _____

RUBEROID

PERFORATED

AIR-VENT FELT



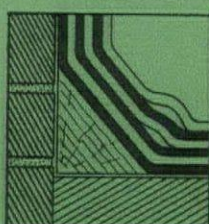
Pin-point Perforations Form "Inlet" and "Outlet" Valves



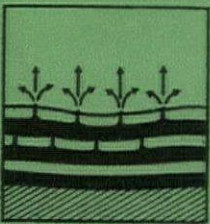
TRAPPED AIR CAUSES BLISTERS



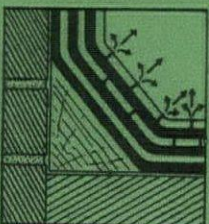
On Flat Roof Decks



At Flashings and Bends



Air-Vent Prevents Blisters



Air Escapes thru Perforations



THE ANSWER TO ROOF BLISTER PROBLEMS

• The "Double Valve" action of Ruberoid Air-Vent® Felt averts many annoying roof failures. Air, trapped under roofing, expands with the sun's heat, causing blisters that bulge and lift. Patented Air-Vent Felt has pin-point perforations—punched alternately from top and bottom—that form "Outlet" and "Inlet" valves. When Air-Vent is laid, the air or vapor beneath is forced out through these tiny "Outlet" valves. Asphalt seeps through the "Inlet" valves giving a better bond between the layers of

felt. Result: freedom from blister problems because there are no air bubbles to expand and lift the felt from below.

Ruberoid Air-Vent Felts (available in both Asphalt and Asbestos types) have proved themselves through years of use on industrial and commercial buildings in all weathers. Specify Air-Vent for built-up roofs . . . it reduces roofing failures and costly repairs. Ask your approved Ruberoid roofing contractor or write us for full specifications.

*PAT. NO. 2096784

The RUBEROID Co.

Executive Offices: 500 Fifth Avenue, New York 18, N. Y.
ASPHALT AND ASBESTOS BUILDING MATERIALS



The Burning Question...

Weigh your answer well...you who plan and select materials. For a clause in the specifications that leaves a loophole for fire can be a sentence of death and destruction . . . whereas, a specification of fire protection acts as a guardian for life and property.

There's one right answer—walls and ceilings “Fire-Sealed” with gypsum plaster applied over a gypsum base—“Fire-Sealed,” because building framework cannot burn as long as fireproof gypsum is there to shield it. For gypsum fights fire and allows time for help to arrive.

Your answer—is Red Top* plaster and Rocklath*, names that have won fame through use on more walls and ceilings than any other brands. The reason is they provide this protection and do it best.

*Trademarks Reg. U. S. Pat. Off.

*are your walls
“Fire-Sealed”?*



UNITED STATES GYPSUM

Manufacturers of Building and Industrial Products Since 1901

GYPSUM • LIME • STEEL • INSULATION • ROOFING • PAINT



"I'm glad you asked. The salad dressing was by Chef Pierre . . . the new swing singer is Sugar La Mar . . . and the Air Conditioning is by General Electric."

Air Conditioning makes a hit with tenants and shoppers too!

Of course, customers like to linger in *properly* air conditioned night clubs, restaurants and theaters. And their enjoyment of this cool comfort may well lead to a new viewpoint on apartments, hotel rooms and offices, too.

So there's something for architects and building management groups to think about in this cartoon, reproduced from a G-E advertisement originally addressed to readers of Time, Business Week, Newsweek and the leading restaurant, store and theater publications.

You're probably already planning to capitalize on the public's interest in air conditioning. Now, you can take practical steps toward realizing your plans—enlist the cooperation and "know how" of trained engineers.

By turning to G-E for air conditioning equipment you gain by G-E's unified responsibility in the design of all important system components . . . and by widespread engineering, installation and servicing facilities through authorized dealers and contractors. And in G-E postwar equipment, new features will give you further advantages . . . greater economy, compactness and flexibility.

☆ BUY...and hold...WAR BONDS ☆

General Electric Company, Air Conditioning and Commercial Refrigeration Divisions, Section 41310, Bloomfield, New Jersey.

Air Conditioning by
GENERAL  ELECTRIC

Hear the General Electric Radio Programs: The "G-E ALL-GIRL ORCHESTRA," Sundays, 10 P. M., EWT, NBC . . . "THE WORLD TODAY" News, Every Weekday, 6:45 P. M., EWT, CBS

LETTERS

(Continued from page 190)

ball, politics, and I personally had a hand in tennis a decade ago—of those of us from Texas having to go east and whip hell out of the so-called “big boys” (at least they thought so). We had to do it not only once, but year after year in order to get meager recognition in a national way. It looks as if we must do it in architecture now—and don't think we can't—and while we're still a part of the Union!

KARL KAMRATH

Ft. Sam Houston, Tex.

INVESTMENT IN PREFAB

Forum:

Your articles on prefabrication are most interesting, but it seems to me that you have neglected the problem of investment. An important question in small house design is: Would the income equal the outgo if the owner were compelled to find cheaper shelter? To accomplish this, design has to follow the efficiency used in commercial and industrial construction. Houses must be good investments or the banks will not supply the wherewithal.

In the past, before FHA, the banks supplied 50 per cent. The purchaser and private funds, taking second mortgages at large discounts, supplied the remaining 50 per cent. The bank was safe with its 50 per cent and was little concerned with reduction of the mortgage. Because of these old long term mortgages on most homes it has been impossible to get the banks interested in anything new in home construction. It would depreciate their equities in these older properties.

Now, thanks to FHA it is found practical to sell a home for as little as 10 per cent down, the banks protected by the U. S. government taking 90 per cent on a 25 year amortizing basis.

Ex-President Hoover's recent study voiced an excellent compromise: 20 per cent down payment in bonds, 80 per cent on a mortgage amortizing in 20 years.

Now if we could get that 80 per cent without the complications of government and the limitations as presented in the past by the banks—and by the banks I also mean insurance companies—we really could go to town on small home building for the working people of America. The solution is to build inexpensive, but still substantial houses.

The lowest cost building material is the concrete block. It is made from the cheapest materials in nature—clay and lime burnt and mixed with cinders or stone by automatic machinery.

Some precast specials could be used

with the standard block—such as a cornice piece, canopies for solar windows, precast pieces to make an excellent wood-burning fireplace, precast filler pieces for a reinforced joist roof or to build economical radiant panel heating systems, precast sills and lintels. This would mean that 50 per cent of the home materials are prefabricated by machinery into conveniently handled pieces which can be built into anything designed on an 8 in. modular unit without measuring or cutting. Variety can be infinite without being costly.

Semi-skilled workmen build up the structure course by course, including such specials as stairs, fireplace, etc. as they go. This procedure permits assembling a high standard, low cost home as durable as the main bank building in your town. No untried devices, these practices have long been used in building for investment, but never permitted in the workman's home.

Can we get that 80 per cent mortgage money for such building? There are so many powerful forces at work against it, that only the optimist will say we shall be able to interest the regular mortgage agencies.

But such homes have been built and used in Buffalo for several years. They are an investment. Rentals are paying for these homes, thus proving their investment value. The workman-owner need not experience the usual sweat, blood and tears only to lose his home during hard times. A tenant will keep up his expenses until such time as he can again afford to live there himself.

HARRY W. MILLER

New York City

SYCOPHANTIC DRIVEL

Forum:

In reply to our fellow countryman — S. W. Hall—in February's FORUM, we hope that he did not succeed in getting a free subscription, besides, 30 pieces of silver is the standard payment for this sort of thing. Your cryptic postscript was the only bright spot in this sycophantic drivel which cast aspersions not only on the writer but on the architects and students in Australia. Without belittling the standard of FORUM, there are students who have managed to gain diplomas and degrees without it.

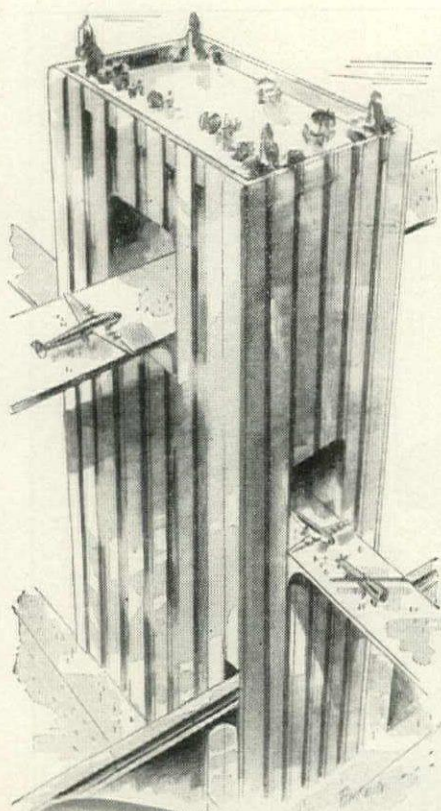
We can only hope that when you receive this letter (making allowance for the Pacific mail service), FORUM readers will have forgotten S. W. Hall, Esq., and all his unsavoury work.

For, and on behalf of the Club,

LOYAL H. ALEXANDER

*The Architectural Club
Sydney Technical College
Ultimo, N.S.W., Australia*

(Continued on page 196)



Montgomery Elevators

IN FUTURE BUILDINGS

NEW BUILDINGS now being planned will utilize new materials and techniques. And where passenger and freight elevators are required, new problems will arise. For assistance in solving these problems you can depend on Montgomery. For nearly 50 years Montgomery Elevators have been giving dependable service in thousands of buildings throughout the country. Accurate records show that practically no major repairs have ever been required. Too, original cost of Montgomery Elevators is generally lower than that of other comparable makes. If you are planning a specific project, we invite your elevator problems.

MONTGOMERY MANUFACTURES a complete line of passenger and freight elevators, electric dumbwaiters and special equipment for vertical transportation.



HOME OFFICE • Moline, Illinois
Branch Offices and Agents in Principal Cities

"HILLS AND VALLEYS"

... lovely in a landscape



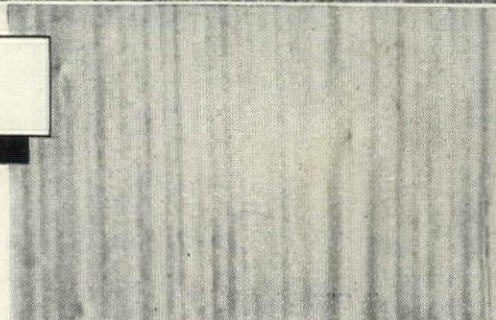
... all wrong in a paint film

"HILLS AND VALLEYS"—which is another way of saying *pronounced brush marks*—are bad news in a paint film. In the "valleys" the film is thinner—more likely to break down. In Pittsburgh Paint (see illustration below, at right) brush marks are rounded, without deep valleys. The result is a uniform film which resists cracking and peeling.

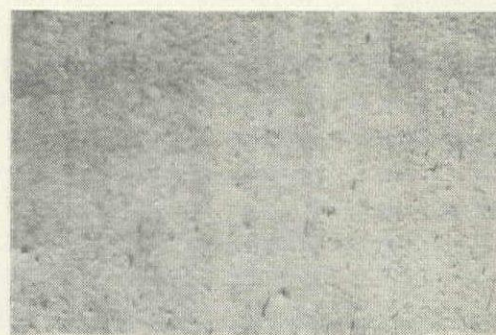
Pittsburgh Paints level out smoothly from the brush because they are enriched with "Vitolized Oils." These improved oils not only promote better application, but they also keep the paint film LIVE, tough and elastic—enable it to contract and expand as the temperature changes. This is known as *live-paint protection* and is still another reason why Pittsburgh Paints resist cracking and peeling.

In addition, many Pittsburgh Paints are fortified with special molecular-selection oils, which vastly improve the drying qualities and make it possible for Pittsburgh to control uniformity of paint performance.

Thanks to these oil developments, Pittsburgh technicians are able to "build" paints that have every desirable quality architects look for. For paint jobs that reflect credit on your professional judgment, specify Pittsburgh Paints.



ORDINARY PAINT



PITTSBURGH PAINT

PITTSBURGH PAINTS
PITTSBURGH PLATE  GLASS COMPANY
PITTSBURGH PENNA.
PITTSBURGH STANDS FOR QUALITY PAINT AND GLASS

A LETTER FROM ITALY

(Letters continued from page 194)

This description of army construction in a combat zone was sent us by an Air Corps Lieutenant:

Forum:

When this Group reached its present airdrome site there was nothing but a steel matting strip for takeoffs and landings. The one useable building in sight—a farmhouse—was appropriated for Group Headquarters. Every other type of building had to be built from the freezing mud up. Inasmuch as this Group was put down in the hilly sheep



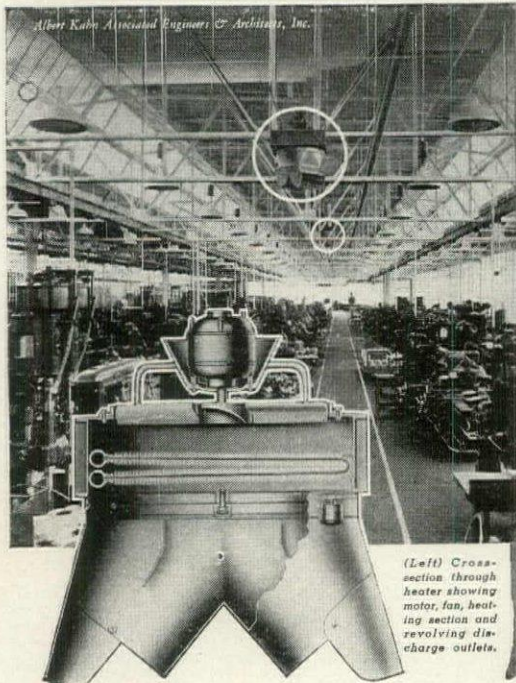
Typical House

and small farm country of southern Italy all building materials were almost impossible to get, lumber being the scarcest item, with hardware fixtures running a close second. In spite of the

difficulties involved, individual combat crews and ground crewmen began building homes and a base that today compares favorably with many in the States.

Approximately 65 per cent of the Group's personnel live in homes designed and constructed by themselves, while 100 per cent of them have improved living conditions to an almost unbelievable extent.

On the occasion of Major General Twining's last visit, he complimented the entire group on their initiative and industry and said that we had one of the finest bases in the Theatre, although many other Groups moved into bases



(Left) Cross-section through heater showing motor, fan, heating section and revolving discharge outlets.

ONE FACTORY MAN TELLS ANOTHER:



Say Tom, it was a lucky day for us when that heating contractor persuaded the boss to install those Wing Revolving Heaters. Remember how we all had to work with our coats on during the winter?

Do I? And how production slowed up? It was too darn cold to work. Fred, !!! but a hot the increase in production for next winter alone will almost pay for the installation of these new heaters.

You're right Tom. That heating contractor sure knew what he was talking about.

WING Revolving HEATERS

ELIMINATE HOT SPOTS AND COLD SPOTS

One of the first noticeable effects of installing Wing Revolving Unit Heaters is the thorough, uniform distribution of heat accomplished by the slowly revolving discharge outlets. Cold corners are eliminated; there are no sickening concentrated blasts of hot air; bulky machinery or packing cases do not shut off the distribution of the heated air.

In addition, a sensation of fresh, live, invigorating warmth is enjoyed by the workers, resulting naturally in increased efficiency. Indeed, this latter effect can be secured in summer as well, for, with the steam turned off, the fans and the revolving discharge outlets produce a delightful cooling effect that is equally effective in maintaining production on the hottest days.

Write for a copy of Bulletin HR-4

L. J. Wing Mfg. Co.

154 W. 14th St., New York 11, N. Y.

Factories: Newark, N. J., Montreal, Canada



Officers' Mess

already well-equipped with buildings of every nature left by the Italian and German Air Forces.

A dubious compliment was paid the Group when Berlin Sally warned us to expect to see all our pretty little white



Officers' Club

homes crumble into piles of dust after the Luftwaffe was through with us.

So the men of this Group have built themselves a base of which we are all very proud. It has its own water system,



House with tent roof

electrical system, community showers—in other words a complete city in itself. So much so that the natives of a neighboring Italian village are already planning to leave their centuries old city and move into our buildings as soon as the Group pulls out.

E. J. DEVNEY
U. S. Army



Making Work by Saving Work



Just before the war, millions of American housewives began to realize that they were paying an unnecessary penalty in time and health for working in kitchens badly arranged and poorly equipped. Youngstown Pressed Steel, awake to this rising revolt against outmoded kitchens, designed and developed modern work-saving kitchens made from pressed steel.

Immediately, thousands of American housewives bought YOUNGSTOWN Kitchens and YOUNGSTOWN PRESSED STEEL DIVISION, MULLINS MANUFACTURING CORPORATION, W.

learned how easy and pleasant their kitchen work could be.

In these strenuous days, crowded with service activities, how much the work-saving features of YOUNGSTOWN Kitchens meant to all those other housewives still in their old-fashioned kitchens.

When the victory we are all working for comes to the world, YOUNGSTOWN will again be ready with the convenience that thousands upon thousands of housewives are longing for.

Help Win the Fight by Buying War Bonds. After the war, buy YOUNGSTOWN Kitchens that will save work for the home production and distribution of a multitude of workers.

This advertisement will appear in:

THE LADIES' HOME JOURNAL
GOOD HOUSEKEEPING
BETTER HOMES & GARDENS
THE AMERICAN HOME
HOUSE BEAUTIFUL
THE PARENTS' MAGAZINE



Youngstown Kitchens

The new YOUNGSTOWN catalog, "Get Acquainted With Your Kitchen," tells how to plan for new comfort in your peacetime kitchen. Send for your copy today.

YOUNGSTOWN PRESSED STEEL DIVISION
Mullins Mfg. Corp., Dept. AF-1004, Warren, Ohio.

Please send me YPS catalog, "Get Acquainted With Your Kitchen" ☐ I plan to modernize ☐

Please send me Loose Leaf Scrap Book for kitchen ideas ☐ I plan to build ☐

NAME _____ STATE _____

STREET _____

CITY _____

MAKING PROFITS by SAVING WORK

As soon as civilian buying begins, no field will be lusher with "ready-to-buy" prospects than the modern kitchen field!

Youngstown Pressed Steel has kept YOUNGSTOWN Kitchens and their work-saving, step-saving features before 16,000,000 National magazine reading families, constantly. Floods of inquiries prove that women are thinking NOW in terms of work-saving kitchens for postwar living.

YPS dealers will have the advantage of inquiries from prospects in their own territory.

Youngstown Kitchens



Please send me YPS booklet, "Get Acquainted with Your Kitchen Business."

YOUNGSTOWN PRESSED STEEL DIVISION
Mullins Mfg. Corp., Dept. AF-1004, Warren, Ohio

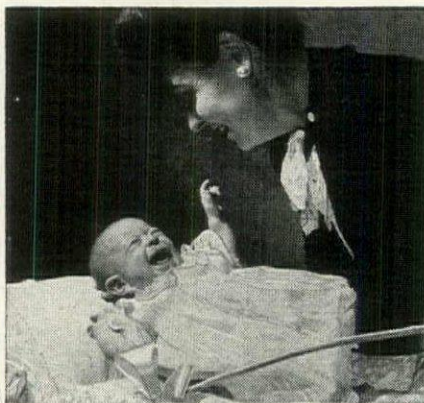
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Street _____

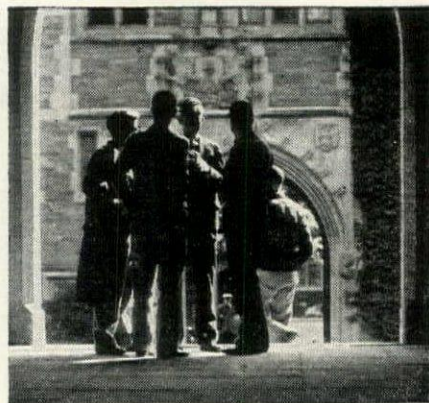
City _____ State _____

SAVE NOW...fight inflation...

..and these
are things
worth
saving for!



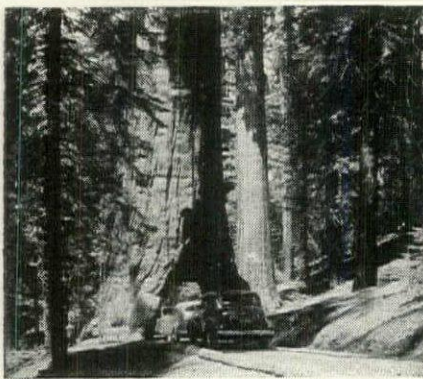
SAVE FOR CHILDREN! It costs money to have a child, to raise a child. But where's the father or mother who would tell you it isn't worth every penny it costs and more? Save now... while the money's coming in....save to have and enjoy your children while you're young!



SAVE FOR COLLEGE! If you went to college yourself, you want your children to go, too. If you didn't—that's a double reason you want them to have the good life you missed. Start your college fund now—while you're earning good money. It will come in handy.



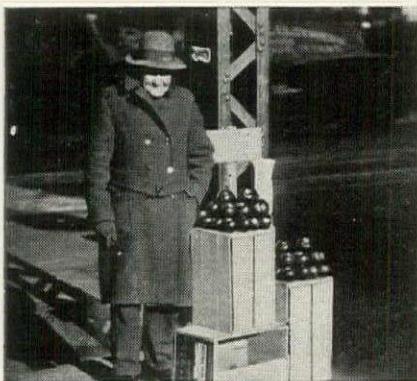
SAVE FOR A HOME! A house of your own, a garden to dig in, room-to-grow for the children—every man and his wife want that. Houses are high-priced, hard to get, now. But there'll be a lot of home building after the war. Save for *your* house now.



SAVE FOR A TRIP! Today's no time to travel. But after the war—aren't you rarin' to go? To the ocean or the mountains, to Yellowstone or the Smokies, to Mexico, or the new Alaska highway. Sensible saving today can finance glorious spending then.



SAVE TO RETIRE! Sooner than you think, the day will come when a little shack in Florida or a place in the country looks better to you than an active life in town. Social security is good—but it won't pay for all you want unless you supplement it.



SAVE FOR SAFETY! Money's easy today! But everybody can remember that it wasn't always that way—and it may not be again. The man who has a little money laid by, helps prevent depression—is in better shape to ride out hard times if they come.



SAVE TO SAVE AMERICA! It's the money you *don't* spend that helps keep prices down. And only by keeping prices down—saving, not spending—can we head off inflation, keep America a stable, happy place for our boys. For *your* sake, for *theirs*—**SAVE!**

- 4 THINGS TO DO to keep prices down and help avoid another depression**
1. Buy only what you really need.
 2. When you buy, pay no more than ceiling prices. Pay your ration points in full.
 3. Keep your *own* prices down. Don't take advantage of war conditions to ask for more—for your labor, your services, or the goods you sell.
 4. *Save.* Buy and hold all the War Bonds you can afford—to help pay for the war and insure your future. Keep up your insurance.

HELP US KEEP

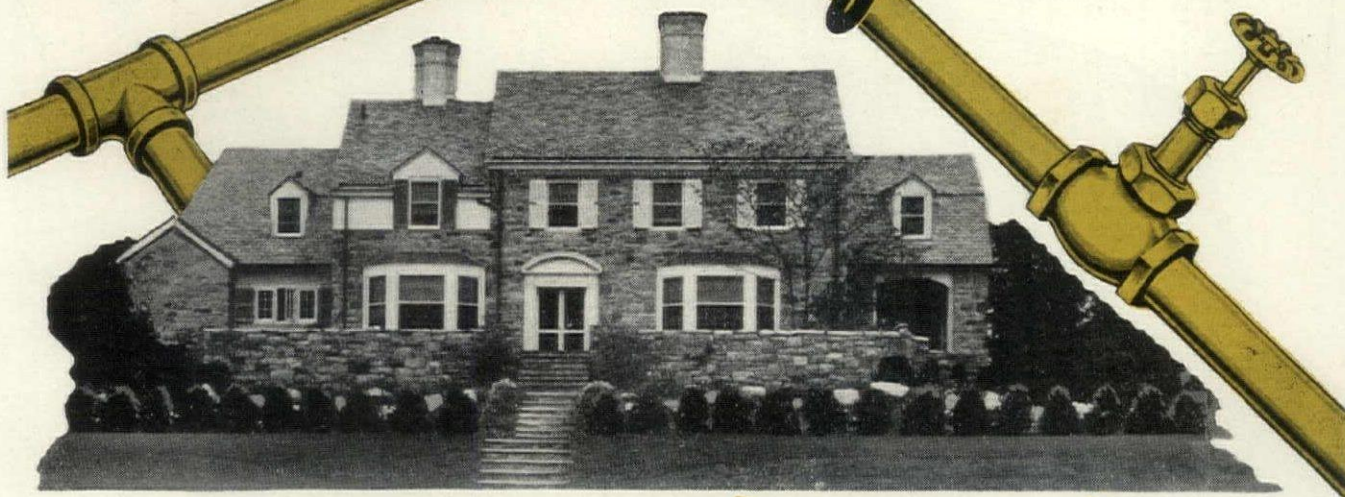
PRICES DOWN

A United States War Message prepared by the War Advertising Council; approved by the Office of War Information; and contributed by this magazine in cooperation with the Magazine Publishers of America.

THE *Modern* METHOD OF JOINING COPPER AND BRASS PIPE

FOR LEAKPROOF PIPE CONNECTIONS

specify *Silbraz** Joints

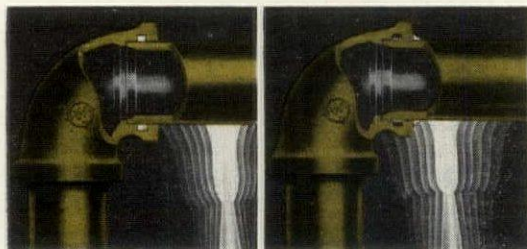


MADE WITH *walseal**
VALVES, FITTINGS and FLANGES

EASY TO INSTALL



Even in cramped quarters Walseal valves and fittings can be easily installed.



After fitting pipe into Walseal valve or fitting, the pipe is expanded by heating with the oxyacetylene flame.

Next, both pipe and fitting are heated until the alloy flows out and forms a fillet at edge of fitting, indicating that Silbraz joint is completed.

In modern homes as in modern public buildings, "one-piece" copper and brass lines made with Silbraz joints save trouble and cost by eliminating leaky joints, maintenance, and repairs. Make Silbraz joints with Walseal valves, fittings and flanges. Silbraz joints are silver-brazed joints — leakproof, permanent, and stronger than the pipe itself.

In thousands of installations ranging from war ships to buildings these modern pipe joints have convincingly proved their worth. In fact, no properly made Silbraz joint has ever failed.

Be sure to include Walseal products and Silbraz joints in your present and post-war planning. Walworth Catalog 42 gives full details on the complete line of Walworth piping products. Write on your company letterhead for a free copy.

*Reg. Trade Marks

MAKE IT A "ONE PIECE PIPE LINE" WITH WALSEAL

WALWORTH
valves AND fittings

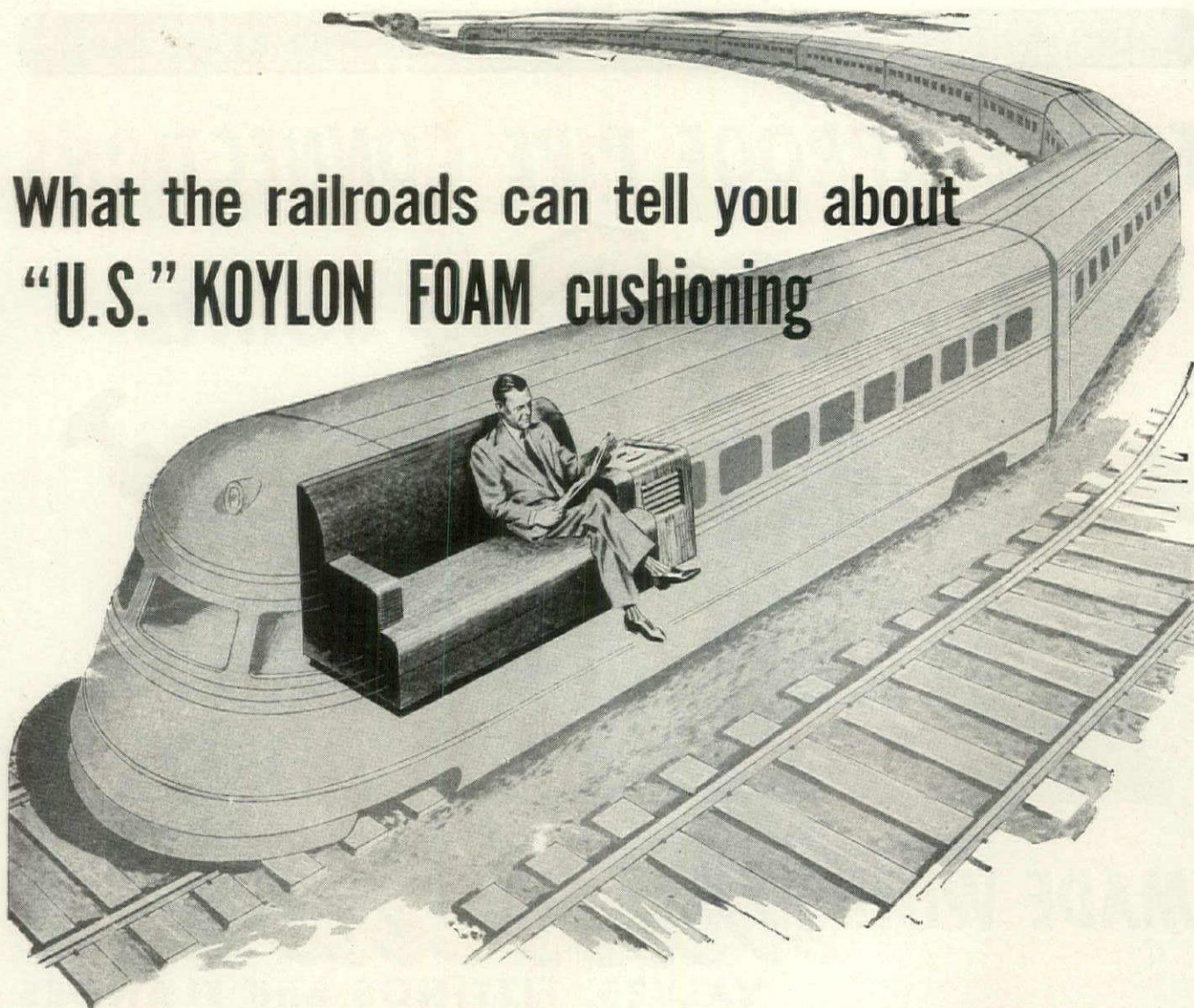
60 EAST 42nd STREET, NEW YORK 17, N. Y.



BOSTON WORKS
KEWANEE WORKS

DISTRIBUTORS IN PRINCIPAL CENTERS THROUGHOUT THE WORLD

What the railroads can tell you about "U.S." KOYLON FOAM cushioning



Architects, decorators and interior designers who specified "U.S." Koylon Foam Cushioning before the war will tell you that it is not only sound and comfortable construction, but easy to use—available in moulded, one-piece forms and in yardage that can be cut to fit.

But theirs is only part of the story!

"U.S." Koylon Foam has really been put to the test in practical use on railroads where hundreds of thousands of passengers have slept millions of miles on "U. S." Koylon Foam Mattresses during the past 8 years.

"U.S."
Koylon
Reg. U. S. Pat. Off.
FOAM

Serving Through Science

UNITED STATES RUBBER COMPANY

1230 SIXTH AVENUE • ROCKEFELLER CENTER • NEW YORK 20, NEW YORK



HERE IS TYPICAL RAILROAD EXPERIENCE WITH CONVENTIONAL TYPE MATTRESSES

“At 6-month routine inspection periods, it is often necessary to repair center sections of conventional type mattresses, where the heavy part of the body rests.”

“At 18-month overhaul periods, conventional type mattresses are completely re-worked.”

“At the end of 36-month periods, many conventional type mattresses have to be replaced.”

BUT WITH "U.S." KOYLON FOAM MATTRESSES —

“Maintenance costs on "U.S." Koylon Foam Mattresses have been practically nil. No repairs or replacements. Some have been in service for 8 years.”

TODAY "U.S." Koylon Foam is serving only war and medical needs. But one day, it will be back—a better Koylon Foam, and you will be able to specify it as the modern, adaptable cushioning—especially practical for use in space-saving furniture.

THE RANGE IS THE HEART OF THE KITCHEN

IN THE HOME



All activities in the kitchen center around the range. It is literally the heart of the kitchen. That's why housewives prefer Magic Chef. They know it is dependable. Their preference for Magic Chef is based on performance and a sustained program of national advertising over a period of twenty-five years.

and

IN THE RESTAURANT



Magic Chef heavy duty ranges have long been the accepted standard in thousands of restaurants and cafeterias, in hotels, schools, hospitals, institutions, factories and commercial establishments. You can depend on quality and performance to confirm your judgment in specifying Magic Chef ranges. A kitchen survey and planning service is maintained to help in specifying the correct number and type of heavy duty units.

Inquiries are invited.

AMERICAN STOVE COMPANY • 4901 Perkins Avenue, Cleveland, Ohio
NEW YORK • PHILADELPHIA • CLEVELAND • CHICAGO • ST. LOUIS • ATLANTA • LOS ANGELES

MODERNIZE WITH—



Specify a
Magic Chef
CP Gas Range



Magic Chef

RED WHEEL GAS RANGES AND HEAVY DUTY GAS COOKING EQUIPMENT



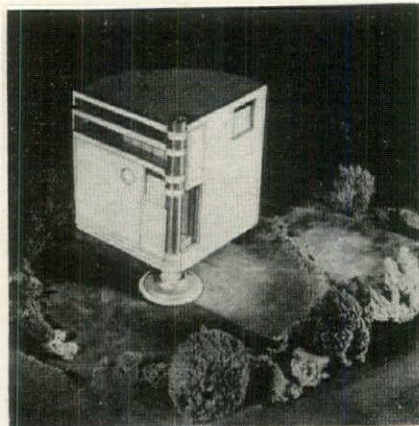
Awarded to
Quick Meal Stove Co.
Division of American
Stove Co.

FORUM OF EVENTS

(Continued from page 6)

model which telescopes vertically as well as horizontally (and packages within the same space), has two additional bedrooms upstairs. Because of the nesting of the rooms, differences exist in the floor and ceiling levels of the various sections. These variations are taken care of by single steps between the rooms, and clerestory strips at ceiling height.

The designer, Mr. T. F. Zavada, envisages a number of other combinations



Typical telescoped sections



Specified for our Post-War Prefabricated HOUSE

1 STRESSED SKIN CONSTRUCTION—is light and easy to handle, is strong and tight against vermin, drafts, and moisture.

2 THOUGHTFUL DESIGN—keeps the summer sun out but lets the winter sun in. The beautiful picture window can face the street or the garden. Careful planning has resulted in usable space equivalent to an average house that is half again as large.

3 INSULATION—in the floors, walls, and ceilings creates cozy warmth with lower fuel bills in the winter, keeps summer heat out effectively.

4 QUALITY CONSTRUCTION—so well built throughout the whole house that it will require little maintenance over a forty-year use expectancy.

5 PROPER ENGINEERING—reduces noise from the outside to a minimum, and eliminates reverberation.

6 SILENT SWITCHES—ample electrical outlets, engineered lighting to avoid eye strain, are electrical features.

7 EASY CLEANING—accomplished by elimination of all mouldings and woodwork that catch dust. Rounded corners throughout the house. Windows open easily, never stick or rattle.

If you have not yet requested that we place you on the mailing list to receive complete facts about our post-war prefabricated house and packaged merchandising plan, write us today. This will be sent as soon as available in the order that inquiries have been received.

Bring Victory More Quickly With
Your Purchase of United
States War Bonds

HOUSTON Ready-Cut HOUSE CO.
Prefabricators Since 1917

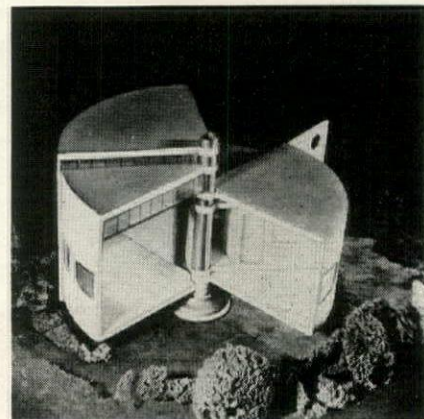
P. O. BOX 124

HOUSTON 1, TEXAS

which would be possible if the manufacture of the sections were standardized. Anticipating the use of lightweight structural materials, he believes that the finished units could be shipped from the plant completely equipped. Only a small cylindrical foundation containing connections for water, sewage and electricity is necessary.

Kitchens and baths are packaged units installed as the two smallest nesting sections.

Despite the obvious resourcefulness with which Mr. Zavada developed his idea it is doubtful that it could be marketed within the price range of moderate incomes, the prime objective



One story: four rooms



Two stories: six rooms

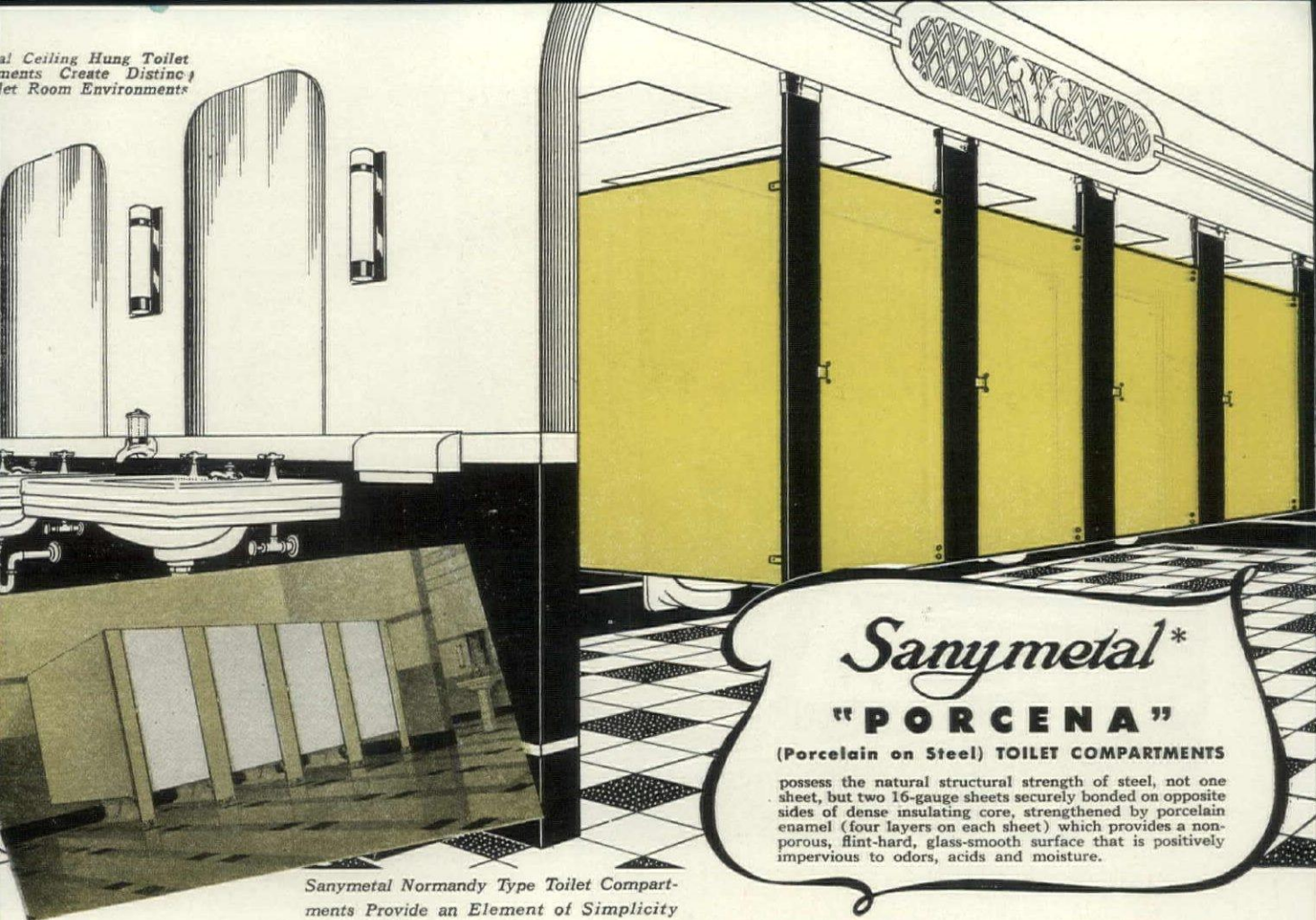
of all prefabricators. However, viewed as an embryonic but imaginative idea, the design indicates that in the future locomotives may not be the sole inhabitants of round houses.

A NEW LIDICE

Leopold Arnaud, dean of the Columbia School of Architecture, has announced that a new Lidice, to be built in Czechoslovakia after the war, is being designed at Columbia under the auspices of the Czechoslovakian government in exile. The designing of the new town is under the direction of Robert H. Podzemny, Czechoslovakian architect and town

(Continued on page 206)

al Ceiling Hung Toilet
ments Create Distinc
et Room Environments



Sanymetal Normandy Type Toilet Compartments Provide an Element of Simplicity

Sanymetal*

"PORCENA"

(Porcelain on Steel) TOILET COMPARTMENTS

possess the natural structural strength of steel, not one sheet, but two 16-gauge sheets securely bonded on opposite sides of dense insulating core, strengthened by porcelain enamel (four layers on each sheet) which provides a non-porous, flint-hard, glass-smooth surface that is positively impervious to odors, acids and moisture.

The Virtues of **SIMPLICITY, CLEANLINESS** and **GOOD TASTE** will not be denied expression

Nothing less will be acceptable in the toilet room interiors of buildings of the future. These essentials will be realized in part through the installation of toilet compartments of the most suitable type and design, because toilet compartments usually dominate a toilet room.

Sanymetal Porcena (porcelain on steel) Toilet Compartments, two types of which are illustrated, elevate the toilet room environment into harmony with other modern appointments of the building, and emphasize the interior architectural treatment of these vitally important rooms in modern buildings. Sanymetal Porcena Toilet Compartments are available in several strikingly new designs and colors, and two different types of construction.

Toilet compartments for buildings of the future, in order to avoid obsolescence, will be fabricated of the ageless and fadeless material, porcelain on steel, as utilized in Sanymetal Porcena Toilet Compartments. Porcelain on steel makes a glass-hard, stainless material that always looks new, does not absorb odors, is moisture-proof and rust-proof and resists the corroding nature of ordinary acids. The glistening porcelain

finish can be wiped clean as easily as any glass-smooth surface, thereby insuring a high standard of cleanliness.

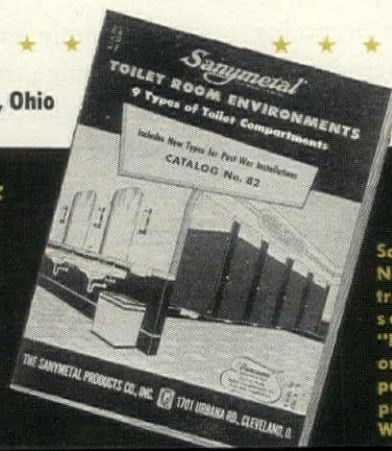
Sanymetal Porcena Toilet Compartments embody the results of over 29 years of specialized skill and experience in making over 60,000 toilet compartment installations. Ask the Sanymetal Representative in your city for further information about planning suitable toilet room environments for strictly modern school, commercial, industrial and institutional types of buildings. Refer to Sanymetal Catalog 17/12, Sweet's Architectural File for 1944, for complete information on toilet room environments, or write direct for copy of Catalog No. 82.

Sanymetal offers six types of toilet compartments suitable for installation in buildings of the future, equally suitable for modernizing toilet rooms in all types of existing buildings. Use Sanymetal Porcena Toilet Compartments to be sure of strictly modern toilet room environments and to insure against obsolescence.

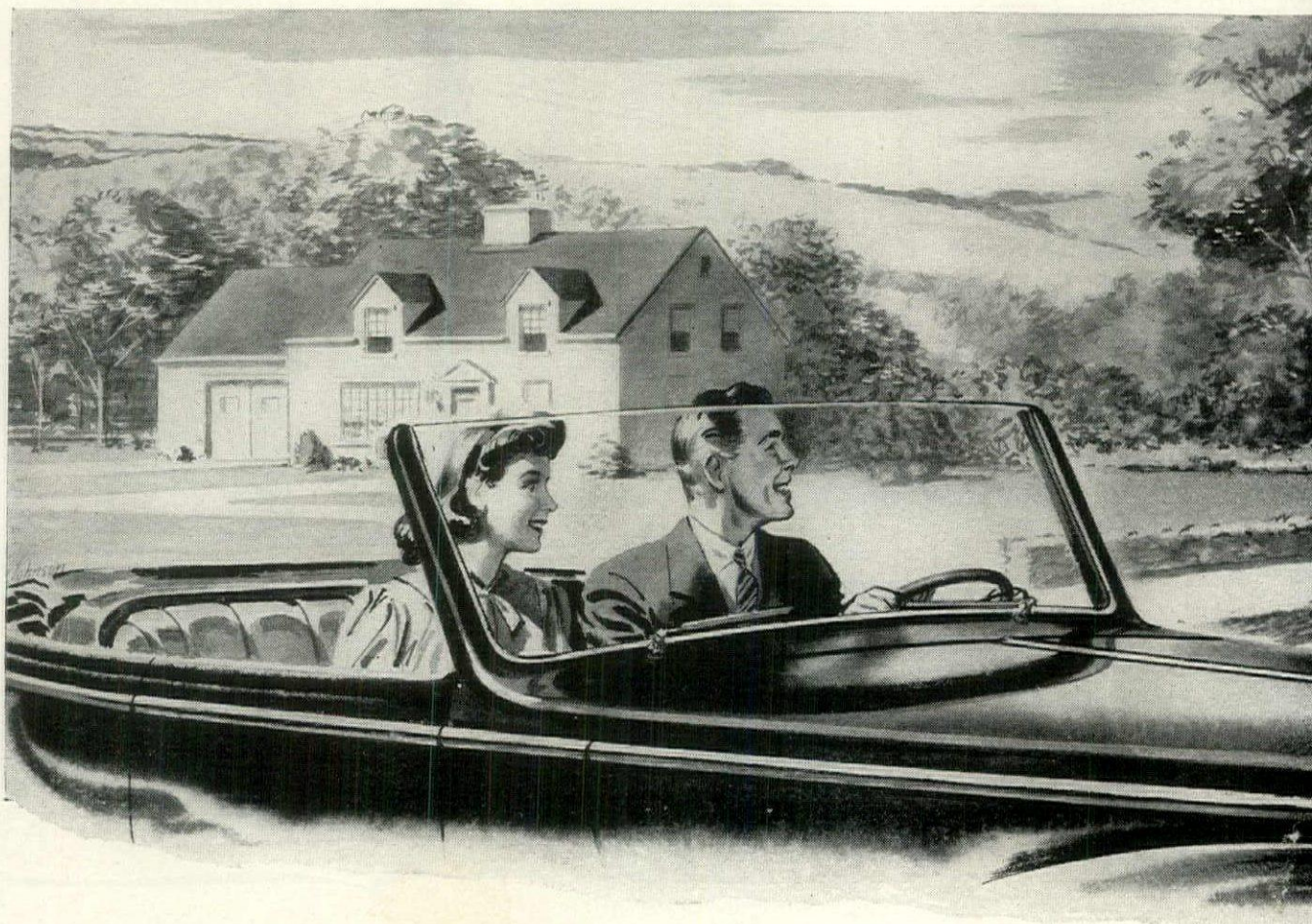
THE SANYMETAL PRODUCTS CO., INC., 1687 Urbana Rd., Cleveland 12, Ohio

Sanymetal*
* Trade Mark Reg. U. S. Pat. Off.

TOILET COMPARTMENTS
and Office Partitions



Sanymetal Catalogue No. 82 contains illustrations in color of several types of "Porcena" (porcelain on steel) Toilet Compartments suitable for post-war buildings. Write for your copy.



Will this be the trend in postwar home construction?

You've heard a lot of fantastic predictions about postwar housing . . . but there has been some good sound thinking, too.

Leaders in the construction field are coming to the conclusion that homes *designed, built, and financed complete with labor-saving equipment* will hold the center of the postwar stage.

It is becoming more and more evident that houses equipped with electric range, refrigerator, dishwasher, automatic heating, and other electrical appliances will have greater consumer appeal.

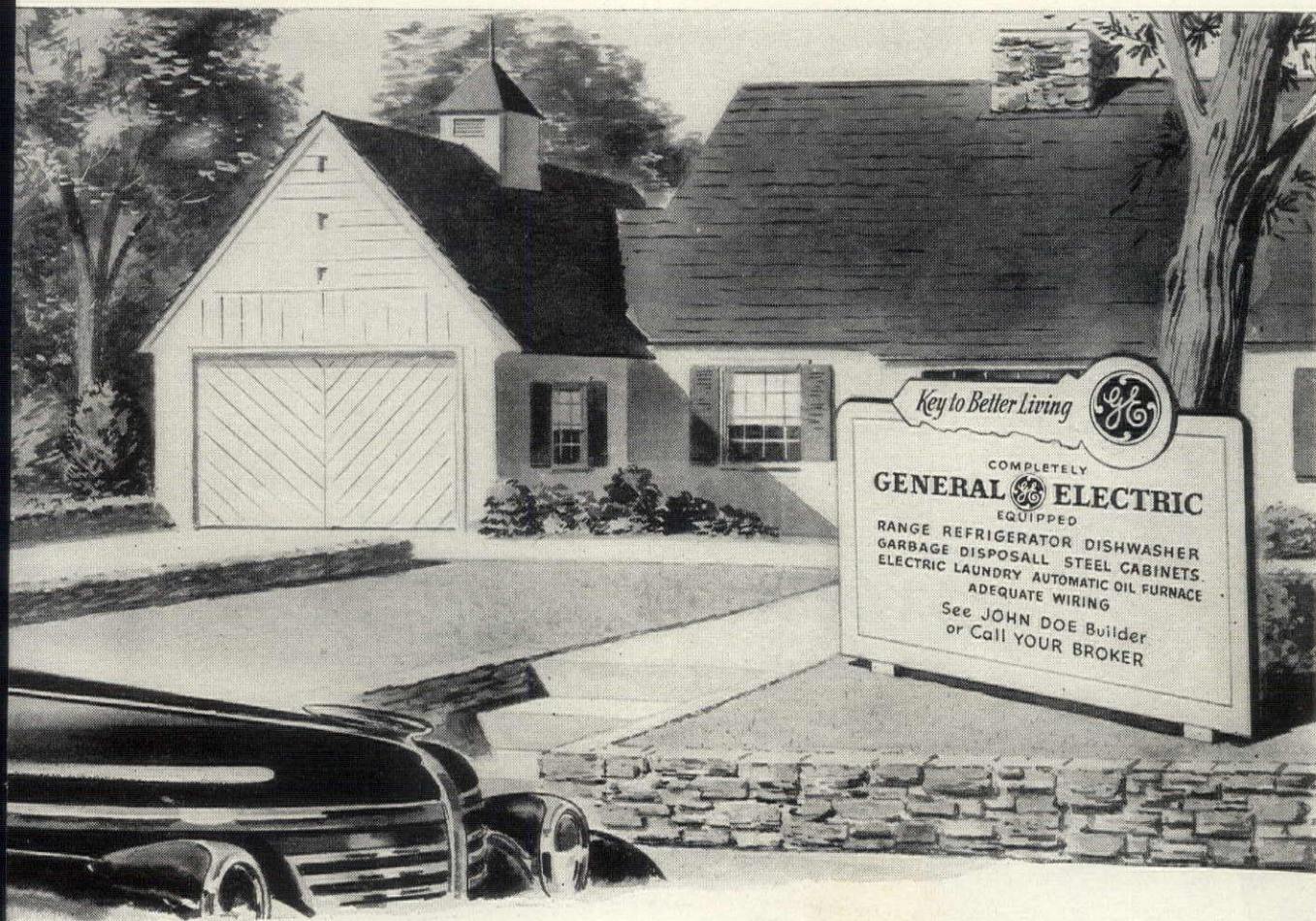
Says a recent issue of *American Builder*, "The day has arrived for homes to be sold with at least the basic mechanical devices and equipment arranged to deliver better living."

A three-way "plus" —

The buyer will get greater satisfaction from a home that includes the electrical appliances he wants and needs. And, when such equipment is covered by the mortgage, any increase in monthly amortization payments will, in almost all cases, be offset by actual savings in operating expenses.

The builder will have houses with greater appeal to offer. The built-in, labor-saving devices will provide additional features which should do much to promote sales—as well as provide word-of-mouth advertising—for the builder.

The banker, too, will benefit because efficient, money-saving equipment will increase the home-buyer's ability to keep up his payments. A mod-



ern, fully equipped home represents a sounder mortgage investment because it increases the buyer's *desire* to avoid risk of foreclosure, as well as his *ability* to meet mortgage payments.

We've got some answers

Since as far back as 1936 the General Electric Home Bureau has been studying the problems

involved in building "electrical servants" into the home.

We feel that we have got some of the answers to some of the questions which you may want to ask.

We'll be glad to help. Home Bureau, General Electric Co., Appliance and Merchandise Department, Bridgeport, Conn.



Everything Electrical for After-Victory Homes

GENERAL ELECTRIC

FOR VICTORY

General Electric is working night and day to speed the attack.

You can help, too, by buying and holding more War Bonds than before.

TUNE IN: "The G-E All-Girl Orchestra," Sunday 10 P. M., E.W.T., NBC—"The World Today" news, every weekday, 6:45 P. M., E.W.T., CBS.

FORUM OF EVENTS

(Continued from page 202)

planner. Constructed around a community center comprised of numerous public buildings, the city will provide an educational example of the most recent trends in American planning to young Czechoslovakian architects whose progress has been interrupted by five years of war. The old Lidice will be used as a war memorial park with the new town located close by.

EXHIBITION

A group of war murals will be shown at the Architectural League, 115 East

40th St., New York, N. Y., October 2nd through 28th under the joint sponsorship of the National Society of Mural Painters and The Artists for Victory.

APPOINTMENT

EUGENE HENRY KLABER, architect and city planner, and CHARLES H. WARREN, JR., architect, have been appointed to the faculty of the School of Architecture at Columbia University. Mr. Klaber, in the capacity of an associate, will direct work in planning and housing. He was formerly chief of the technical staff of the housing division of the PWA and director of architecture for rental and federal housing of the FHA. He received

his architectural education at Pratt Institute, Columbia and the Ecole des Beaux Arts in Paris.

Mr. Warner will be assistant professor in charge of design. A graduate of the Columbia School of Architecture, he has instructed in architecture at Cornell and won Columbia's Schermerhorn Traveling Fellowship in 1942.

OPENING OF OFFICES

WILLIAM C. SCHNEIDER, architect, will open his office at 5920 West North Ave., Milwaukee 8, Wis. Mr. Schneider was for many years connected with the offices of Brust & Philipp and of Richard Philipp in Milwaukee.

WILLIAMS & TWEENEY announce the opening of offices for the practice of engineering and industrial design in the Book Tower, Detroit 26, Mich. Mr. Williams was formerly design executive for the Stout Research Division of Consolidated Vultee Aircraft Corp.; Mr. Tweeney, an engineer, was Acting Director of the Department of Aeronautics at the University of Detroit and, prior to that, maintenance and flight test engineer for the Pan American Airways system.

RUTH GERTH, GEORGE KOSMAK, ALEXANDER KOSTELLOW and ROWENA REED announce the formation of a new firm for the practice of architecture and industrial design at 228 East 61st St., New York 21, N. Y. Miss Gerth's design work has ranged from electrical equipment to typography and packaging. Architect Kosmak has designed shops and showrooms, club houses and restaurants. Mr. Kostellow, a specialist in color and materials, is head of the industrial design department at Pratt Institute. Miss Reed, a stylist and designer has a background of fashion advertising, packaging and architectural sculpture.

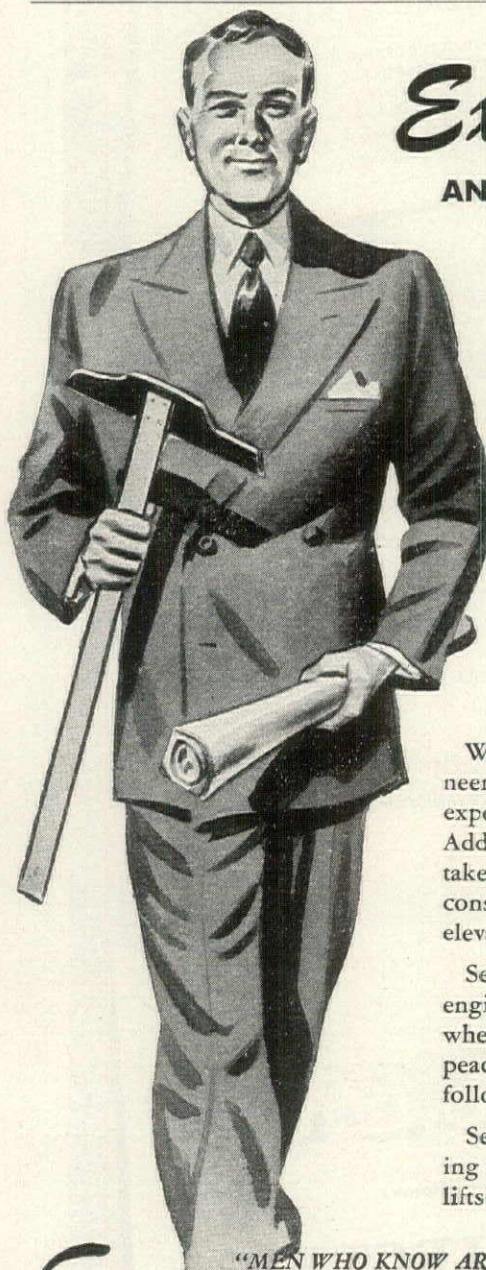
CHANGE OF ADDRESS

GEORGE COOPER RUDOLPH & ASSOCIATES, architects and designers, have moved their office to 155 East 44th St., New York 17, N. Y.

HAROLD SPITZNAGEL, architect, announces the removal of his office to the eighth floor of the National Bank of South Dakota Building, Sioux Falls, S. D.

JAMES KING & SONS, INC., general contractors have moved their offices to the Empire State Building, 350 Fifth Avenue, New York 1, N. Y.

WILLIAM ARILD JOHNSON, architect, has moved his offices from Tacoma to the First National Bank Building, Everett, Wash.



Experience...

ANOTHER LEG TO STAND ON

Consider Sedgwick—for two reasons (there are others, of course).

First—for more than 50 years Sedgwick has designed, manufactured and installed elevators and dumb waiters—drawing on each preceding year's experience to improve succeeding models.

And, second—since the "defense work" days Sedgwick has been designing and manufacturing airplane elevators, ammunition hoists, galley dumb waiters, between-deck elevators, and special lifting and materials handling equipment.

What does this mean to architects, engineers and builders? Simply this. Today's experience has taught Sedgwick much. Added to past experience, the results will take form in improvements in the design, construction and operation of postwar elevators and dumb waiters.

Sedgwick experience plus Sedgwick engineering ability can be of assistance when you are making your plans for the peacetime building boom that is sure to follow the war.

Sedgwick welcomes inquiries regarding elevators, dumb waiters and special lifts for postwar installation.

"MEN WHO KNOW ARE SOLD ON SEDGWICK"

Sedgwick MACHINE WORKS, INC.

140 WEST 15th STREET NEW YORK 11, N. Y.

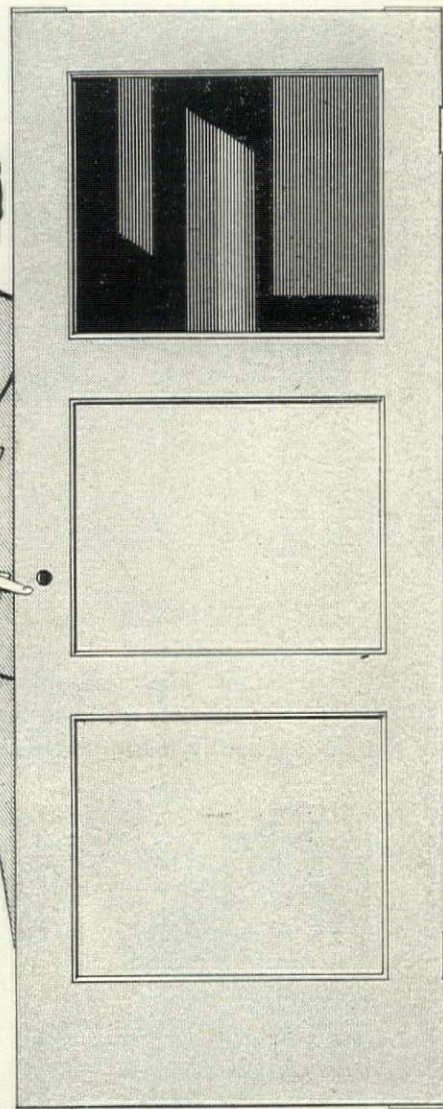
Since 1893 designers and manufacturers of specialized lifting equipment

ELEVATORS • HOISTS • ROTO-WAITERS • MATERIALS HANDLING EQUIPMENT

NOW, MORE THAN EVER,
DOUGLAS FIR DOORS
MEET MODERN REQUIREMENTS

For Door Specifications

Attractive 3-panel interior doors—basic, all-purpose layouts in keeping with today's design trends—assure the utmost in client satisfaction when you specify **Douglas Fir Interior Doors**. What's more, these fine doors are durable, long-lasting—and if FACTRI-FIT features are specified (see below) they go up quicker, fit better, hang better.

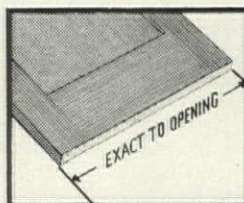


Plan now to feature these improved Douglas Fir Doors. Write for catalog showing Interior Doors, Tru-Fit Entrance Doors, and new specialty items.

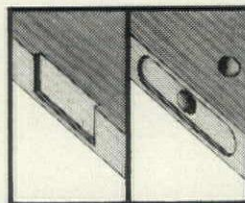
FACTRI-FIT

PRECISION - MADE
DOUGLAS FIR DOORS

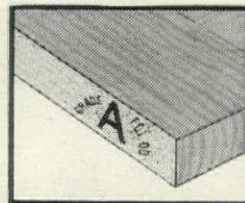
Specify Douglas Fir Doors for essential jobs today, for every job tomorrow. Write for catalog showing complete series of Interior Doors, Tru-Fit Entrance Doors and new specialty items.



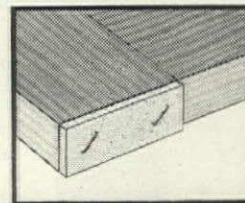
1 FACTRI-FIT doors are pre-fit at the mill, trimmed to exact size, ready to hang without sawing or fitting.



2 FACTRI-FIT doors may be ordered completely machined at your option—gained, bored or mortised by high-speed precision tools.



3 FACTRI-FIT doors (like all Douglas Fir Doors) are edge grade-marked for ease in ordering, specifying and supplying.



4 FACTRI-FIT doors are scuff-stripped to protect the precision-cut corners during handling and shipping.

Now available only for essential building Douglas Fir Doors will be ready again when war needs lessen.

Douglas Fir DOORS

FIR DOOR INSTITUTE

Tacoma 2, Washington

Remember!
NATURE MAKES
DOUGLAS FIR
Durable!

Durable Douglas Fir Doors are made from all-heartwood, vertical-grain, soft, old-growth Douglas Fir.

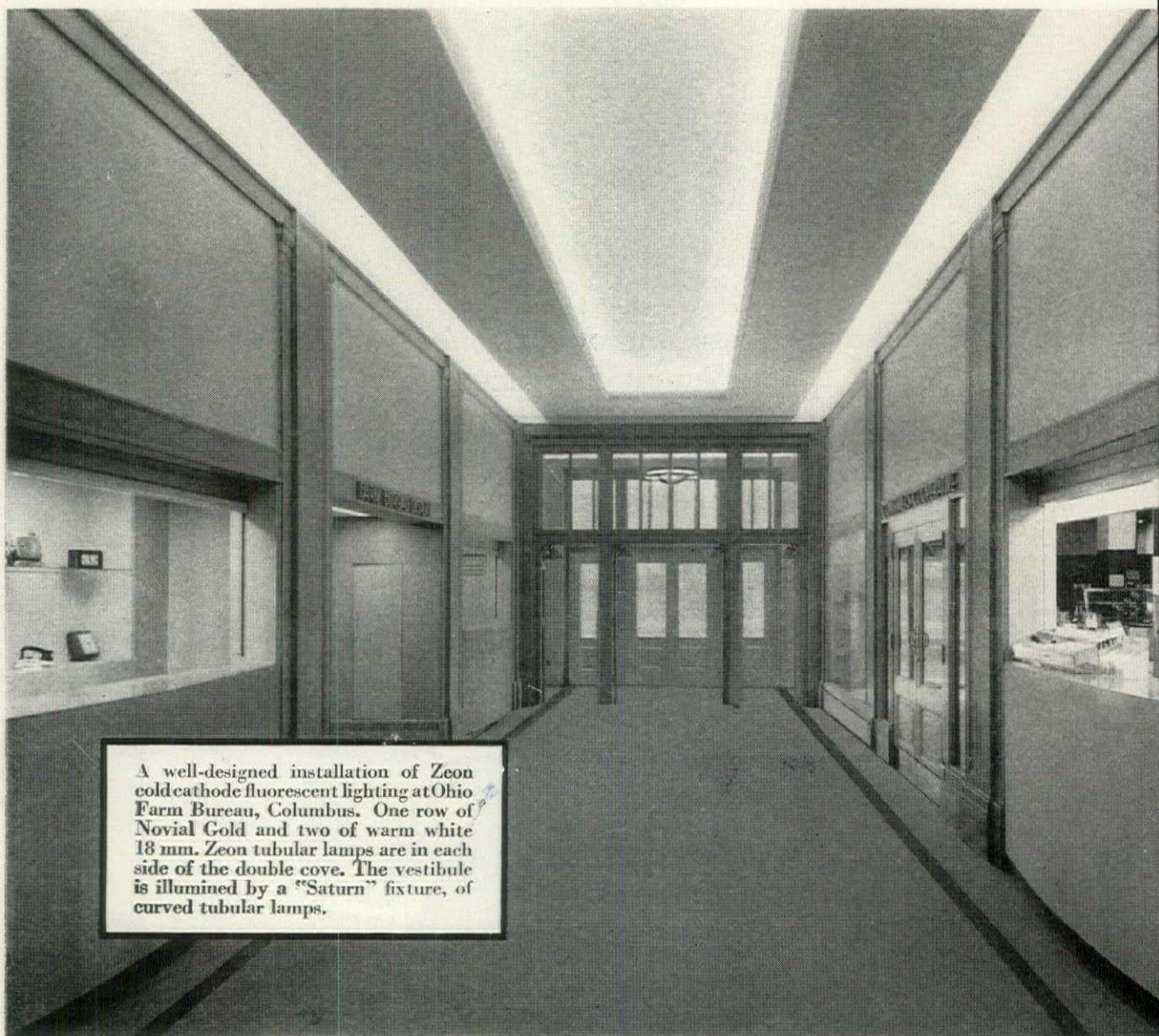
How to take
full advantage of
the economy...
long life...effective
illumination of.....

Cold Cathode

Why COLD Cathode?

Long lamp life and lower maintenance costs are always desirable, sometimes supremely important. These are outstanding characteristics of Zeon cold cathode fluorescent lighting. That is why many architects, builders, contractors,

and managers insist on cold cathode fluorescent particularly when maintenance man-power must be conserved. Notice the list shown below; if you have not used Zeon lighting get details now from Federal Electric Company, Inc.



A well-designed installation of Zeon coldcathode fluorescent lighting at Ohio Farm Bureau, Columbus. One row of Novial Gold and two of warm white 18 mm. Zeon tubular lamps are in each side of the double cove. The vestibule is illuminated by a "Saturn" fixture, of curved tubular lamps.

Fluorescent Lighting



The many advantages which cold cathode lighting offers can be best realized when the lighting is tailored specifically for the area to be illumined. That is one of the advantages Zeon cold cathode fluorescent lighting offers. It is available both in special design, lengths, sizes and shapes and a variety of colors; and in standard size tubular lamp units.

Many locations require a high level of glareless, shadowless lighting. This can be done with Zeon standard units or with long lines of tubular lamps. Either of these can be supplied and installed by your electrical contractor. In other locations, illumination may be subordinated to decorative effects. Such installations are especially effective in hotels, theaters, stores and shops, where straight or curved units and various colors may be required.

To meet these special requirements, Zeon cold cathode lighting can be tailored for you by Federal Electric Company, Inc. and installed by your contractor under the supervision of your architect.

SEND US DETAILS OF YOUR PROBLEMS

Federal Electric Company, Inc. has wide experience in the manufacture, installation, and operation of standard and custom-built lighting systems. Its experience and that of its engineers may be valuable to you. If you will send us details of your lighting problems we will be glad to help you solve them. Write us at 225 North Michigan Ave.; Chicago 1, or 8700 South State Street, Chicago 19, Illinois; or call any of the offices listed below.



FEDERAL ELECTRIC COMPANY, INC.

8700 SOUTH STATE STREET, CHICAGO 19, ILLINOIS • TELEPHONE VINCENNES 5300
225 NORTH MICHIGAN AVE., CHICAGO 1, ILLINOIS • TELEPHONE STATE 0488

SUBSIDIARY COMPANY: FEDERAL BRILLIANT COMPANY, ST. LOUIS, MISSOURI

Branch Offices: Cincinnati • Dallas • Duluth • Houston • Indianapolis • Kansas City
Louisville • Milwaukee • Minneapolis • New Orleans • New York • Philadelphia

LONGER LAMP LIFE

means fewer changes of lamps, less inconvenience and trouble with burned-out lamps.

LOWER MAINTENANCE COST

because lamps seldom need replacing; fewer auxiliaries, less wiring to make trouble.

INSTANT STARTING

without overload; cold cathode lamps start instantly on their operating voltage.

CONSTANT LIGHT FLOW

with no flicker; minimum of shadow; maximum of even, diffused illumination.

FEWER AUXILIARIES

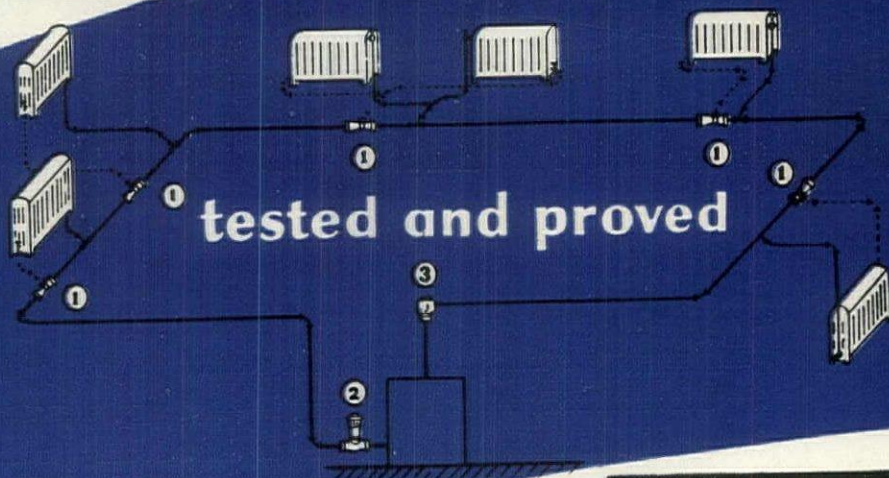
Only transformer and minimum of wiring are needed with cold cathode lighting.

GREATER FLEXIBILITY

in shapes, sizes, colors, and output; standard units or custom-built installations.



"TACO-ONE VENTURI" SYSTEM



RADIANT HEAT PLUS-

The "Taco-One Venturi" System offers all the advantages of radiant heat . . . plus —

the predictable performance of a system proved by successful operation of thousands of installations, complete room-heating by radiant heat plus convected heat,

simple, inexpensive, easily installed piping and fittings,

automatic summer and winter hot water,

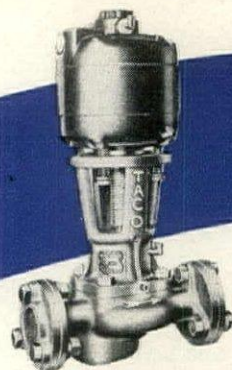
inconspicuous radiators; small heating plant, adapted to ground-floor installation,

circulated warm water; with an even, *friendly* heat.

. . . and many other advantages for the wholesaler, contractor and home owner. Ask your wholesaler, or us, for literature giving further details of this post-war business-building heating system.



1 Taco Venturi Fitting



2 Taco Hy-Duty Circulator



3 Taco Flow Check



PEACETIME HERITAGE

One of Taco's contributions to Victory is Naval-aircraft machine-gun mounts. As a result of these contributions, we now have more precision equipment and more skilled workers—available for post-war production of Taco products, made to their former standards of excellence.



TACO-ABBOTT SYSTEM

Taco

TACO HEATERS, INC., 342 MADISON AVE., NEW YORK 17, N. Y.
TACO HEATERS OF CANADA, LTD., 24 ADELAIDE ST. W., TORONTO

Have you FORGOTTEN TO CHANGE THE SLIDE ?



THIS TYPICAL TOOL LIST

shows what most of today's contractors require to serve you well*

- | | |
|------------------------------|-------------------------|
| Benches—Large | Electric Drills 1/4" |
| Benches—Small | Electric Drills 1/2" |
| Vises 1/2" to 2" | Drills—Twist Misc. |
| Vises 2" to 4" | Taps Misc. |
| Stocks 1/2" to 1" | Whitney Punches & Dies |
| Stocks 1 1/4" to 1 1/2" | K.O. Punches—Sets |
| Stocks 2" Ratchet | Air Hammers |
| Stocks 2 1/2" to 4" | Electric Hammers No. 2 |
| Dies 1/2" & 3/4" | Electric Hammers No. 4 |
| Dies 1" | Reamers Misc. |
| Dies 1 1/4" | Files Misc. |
| Dies 1 1/2" | Star Drills |
| Dies 2" | Hacksaw Blades |
| Dies 2 1/2"—3" | Bullpoints Misc. |
| Dies 4" | Pinch Bars |
| Thread Cutter Pr. Dr. | Socket Wrenches |
| Bender Small | Bolt Stock & Die Set |
| Bender Large | Exten. Cords |
| Hickies (H.W.C.) 1/2" & 3/4" | Burners & Tanks—Gas |
| Hickies (H.W.C.) 1" | Coffing Hoists |
| Thin Wall Bender 1/2" | Chain Hoist 5 Ton |
| Thin Wall Bender 3/4" | Rope—Hemp 1/2" |
| Thin Wall Bender 1" | Rope—Hemp 3/4" |
| Wrenches 18" | Blocks Snatch & Misc. |
| Wrenches 24" | Wagon Trucks |
| Chain Tongs 1 1/2"—2 1/2" | Dollies |
| Chain Tongs 2 1/2"—4" | Jacks—Stone |
| Reamers 1/2"—1 1/4" | Sledges & Hammers |
| Reamers 1/2"—3" | Chain—Coil |
| Oilers | Carpenter Tools |
| Drill Press | Fish Tape 100'—1/8" |
| Power Saw Univ. Band | Fish Tape 100'—3/16" |
| Copper Bender | Fish Tape 200'—1/4" |
| Iron Bender—Universal | Winches Hand Dr. |
| Tool Grinder—Elect. | Winches Power Dr. |
| Work Bench | Power Drive Universal |
| Machinist Vise | Wire Rope 150'—1/4" |
| Electric Welder | Wire Rope 200'—3/8" |
| Forge | Cable Pullers |
| Anvil | "Come Along" |
| Tool Boxes—Steel | Reel Jacks |
| Tool Boxes—Wood | Pick Up Cart |
| Chains & Locks—Ladder | Brake—Cable |
| Ladders—Step 6 ft. | Reels—Pay out |
| Ladders—Step 8 ft. | Reels & Stand—Gang |
| Ladders—Step 10 ft. | Strippers—Wire |
| Ladders—Step 12 ft. | Gas Furnaces |
| Ladders—Step 14 ft. | Elect. Soldering Set |
| Ladders—Step 16 ft. | Steel Lettering Set |
| Ladders—Exten. | Floor Crane |
| Scaffolding Mat. | Air Compressor |
| Tool Grinders—Hand | Elect. Welder |
| | Flex. Shaft Grinder El. |
| | Rolling Scaffold |

*Tool list from Electrical Contractors Association of City of Chicago. 5525

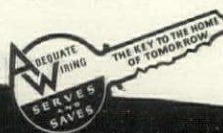
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Today the resources of the electrical contractor that are at your service include a large investment in specially-engineered tools to facilitate his work. In addition, his organization will include specialists in electrical planning and installation, ready to help you with electrical specifications or to supplement your knowledge of local conditions, code regulations and new materials.

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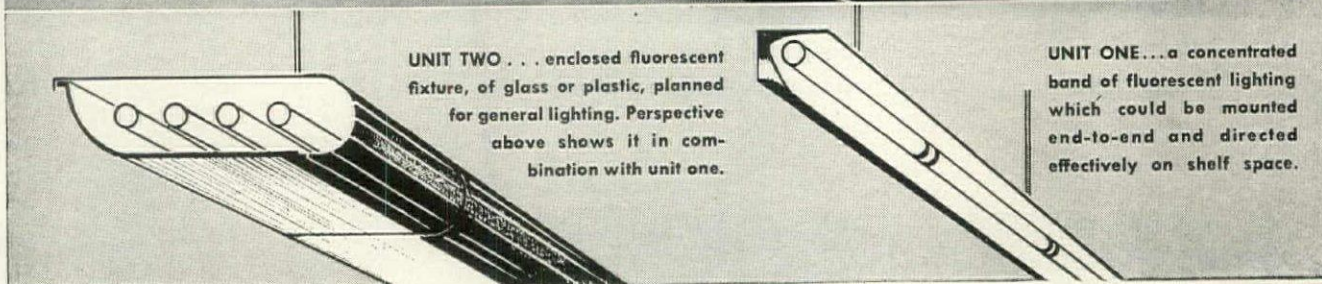
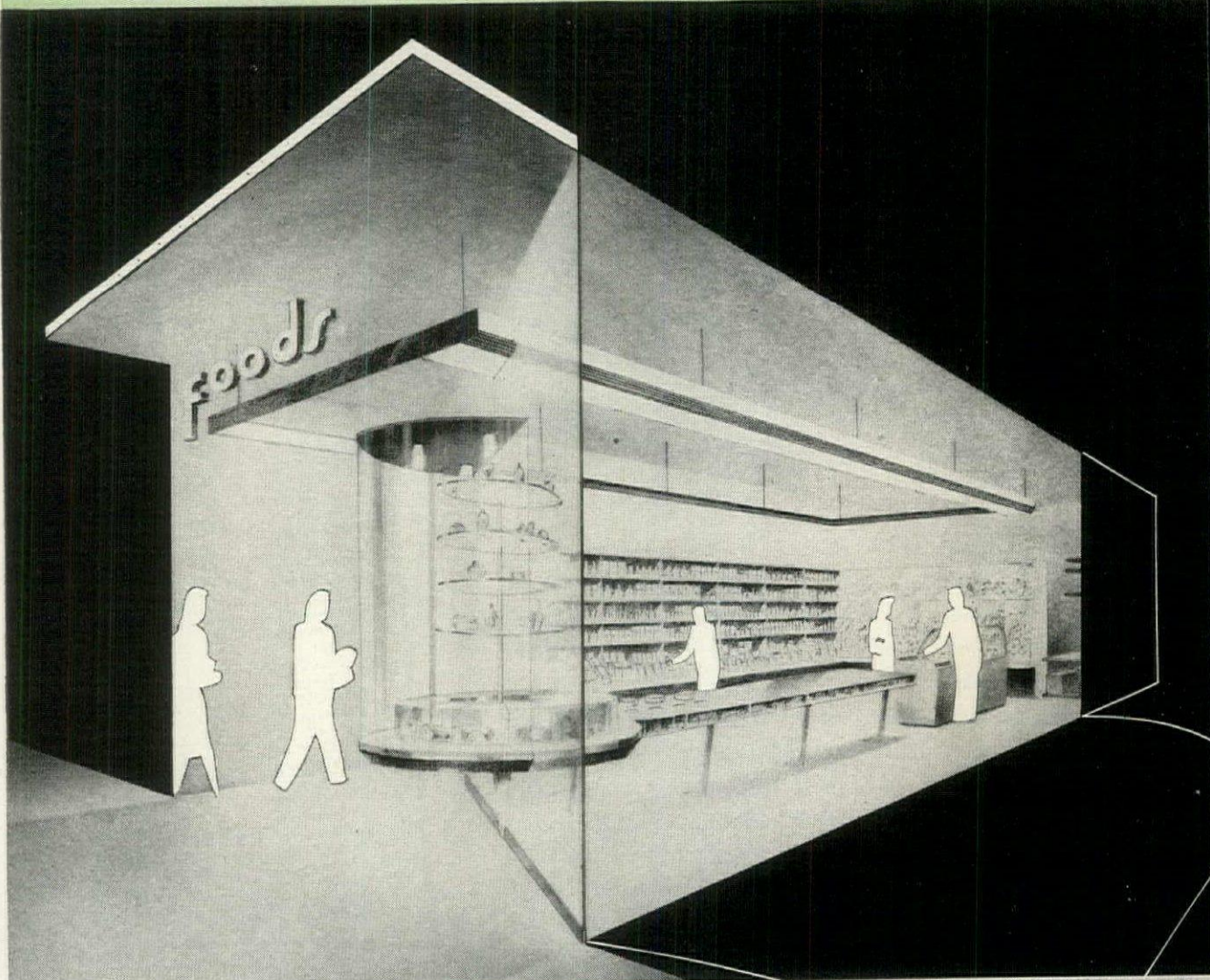
Executive Offices: Graybar Building, New York 17, N.Y.



Light

RE-VITALIZES

No investigation has been made by General Electric Company regarding the patent situation on the design or construction suggestions shown in this advertisement.



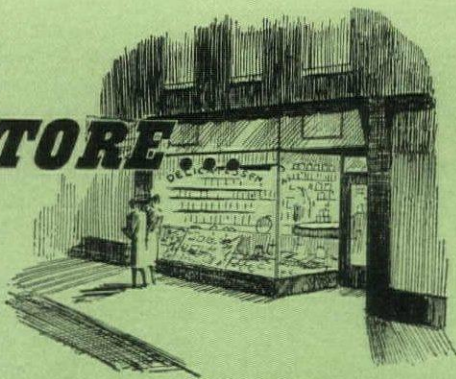
UNIT TWO . . . enclosed fluorescent fixture, of glass or plastic, planned for general lighting. Perspective above shows it in combination with unit one.

UNIT ONE . . . a concentrated band of fluorescent lighting which could be mounted end-to-end and directed effectively on shelf space.

G-E MAZDA LAMPS

GENERAL  ELECTRIC

A NEIGHBORHOOD STORE



GENERAL ELECTRIC brings you one more in its series of postwar lighting perspectives by outstanding architects and designers. To help stimulate further thinking on lighting for stores, G-E presents some unusual ideas by designer G. McStay Jackson, Chicago.

Here's the opportunity Mr. Jackson sees . . .

"Lighting can provide effective postwar help for the neighborhood store. Because light can make the store stand out from its surroundings, can invite folks in to buy, can help display merchandise more appealingly.

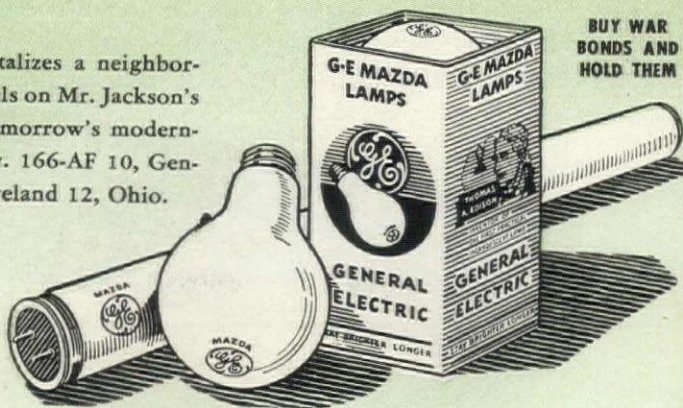
"For example, if you could pull back the walls of a modernized food shop, this picture shows what you might see. A streamlined arrangement of shelves and counters, *all pleasingly illuminated with cool, comfortable fluorescent light*, has revitalized the store interior.

"A striking all-glass store front, set back at one side, together with a well-lighted revolving display, has added extra attraction power for people who pass.

"At the same time, to save money on modernization, the high ceiling has been left in its existing state. The stamped metal pattern, painted in a dark, neutral tone, is not illuminated. Shadows have been minimized by keying the rest of the interior, including the floor, to lighter colors.

"The result is a store that invites new customers and old . . . that builds business with light."

A helpful new booklet, "Light revitalizes a neighborhood store" gives additional details on Mr. Jackson's ideas on effective lighting for tomorrow's modernization. For your copy, write Div. 166-AF 10, General Electric Co., Nela Park, Cleveland 12, Ohio.



THE CONSTANT AIM OF G-E LAMP RESEARCH
IS TO MAKE G-E LAMPS *Stay Brighter Longer*

Hear the General Electric radio programs: "The G-E All-Girl Orchestra", Sunday 10 p.m. EWT, NBC; "The World Today" news, every weekday 6:45 p.m. EWT, CBS.

BOOKS

(Continued from page 28)

style is introduced gradually by a simple evaluation of social requisites and building development. While the reading is by no means dry, the article's strength lies not in the style, but in an impersonal and thoroughly convincing presentation of fact.

In contrast, Joseph Bailey Ellis, in his essay on sculpture, waggishly encourages the gullible reader to "make mud pies of his own." While some of the comments, such as that on the work of

St. Gaudens, display a painful conformity, the chapter as a whole has an air of carefree and agreeable wit; for example, the author's casual reference to some work of "ostentatious display and well modeled inconsequence." In his off-handedness, however, Mr. Ellis fails to achieve the degree of authority present in other articles. He treats sculpture more as though it were a form of occupational therapy than a noble and dignified art.

Painting, industrial design, poetry, music, the theater, the novel and the movies are all covered in brief but excellent chapters. The book terminates with an

eminently just dissertation on the problems of criticism itself by George Boas. (This particular chapter is suggested as bedtime reading for certain noted critics.)

On the whole, Mr. Schoen has done a fine job of editing and writing. If any criticism can be made, it is that the book, because of the broadness of its scope, is too superficial in treatment to be considered a truly important work.

THE CONTRIBUTION OF HOLLAND TO THE SCIENCES. By A. J. Barnouw and B. Landheer. Querido, New York. 386 pp. Illustrated. 5½ x 8. \$3.00.

The recent appearance of a number of books voicing the plea of the small, subjugated nations for a deeper and more lasting cultural understanding seems at

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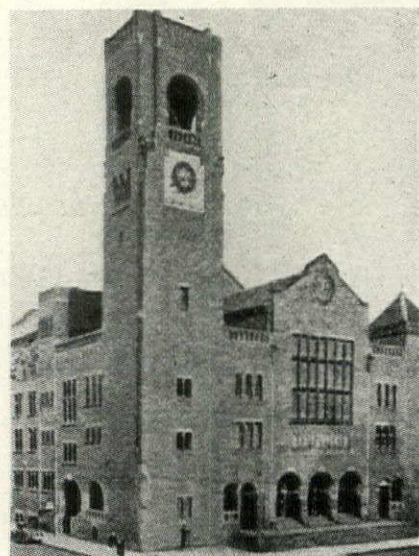
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• See Catalog in Sweet's or Write for Details.

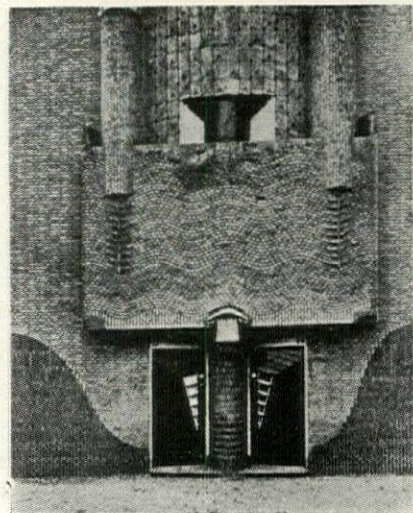
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Exchange Building: Amsterdam

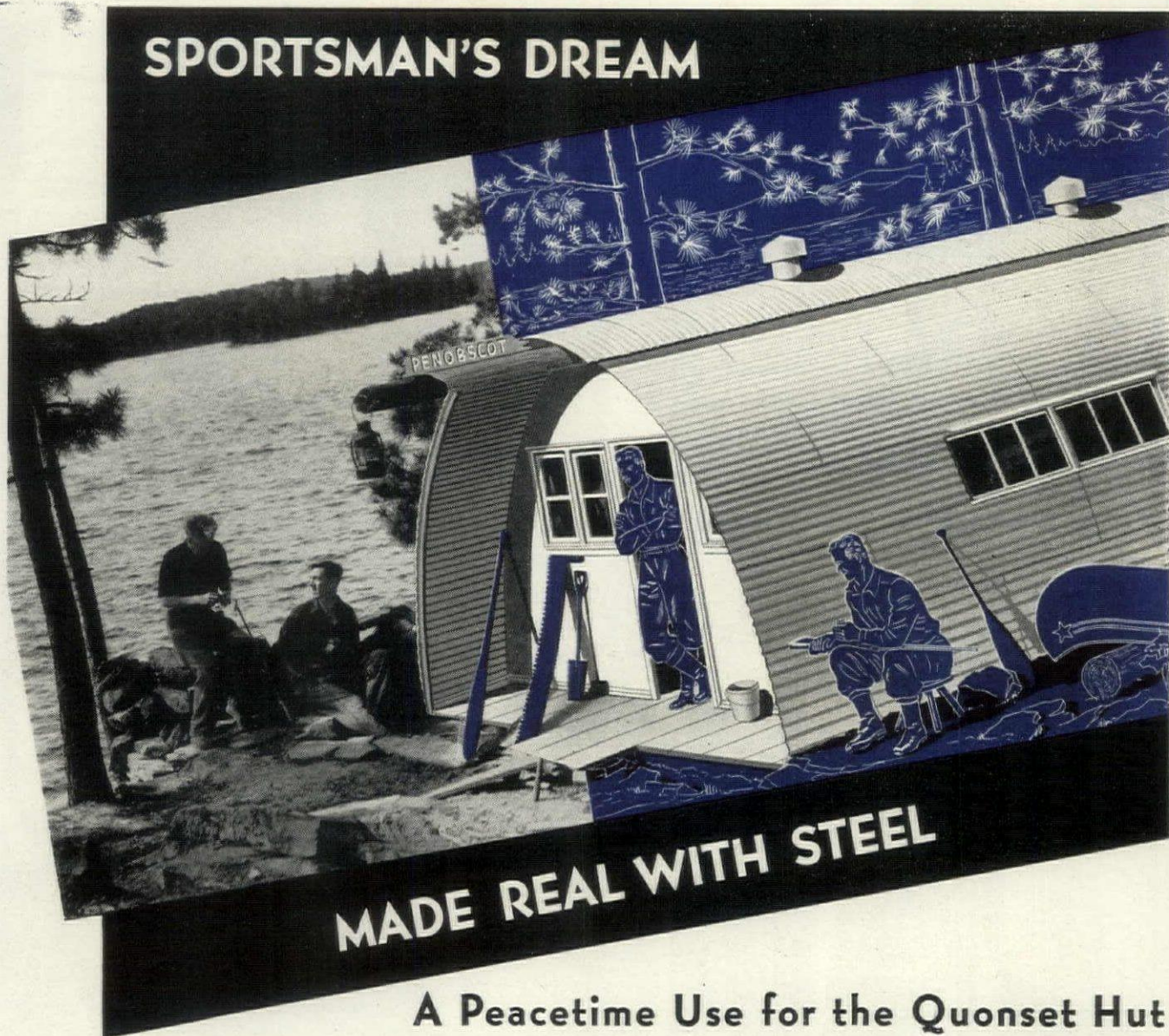


Apartment Entrance: Amsterdam

once ironic and poignant. Such a book is *The Contribution of Holland to the Sciences*. Its aim is to stress the continuity of human achievement, the development of which has come to a temporary standstill because some nations

(Continued on page 218)

SPORTSMAN'S DREAM



A Peacetime Use for the Quonset Hut

When the time comes to exchange a tommy-gun for a deer rifle and a machete for a fly rod, the advantages of Stran-Steel engineering will open up a whole new field of architectural development.

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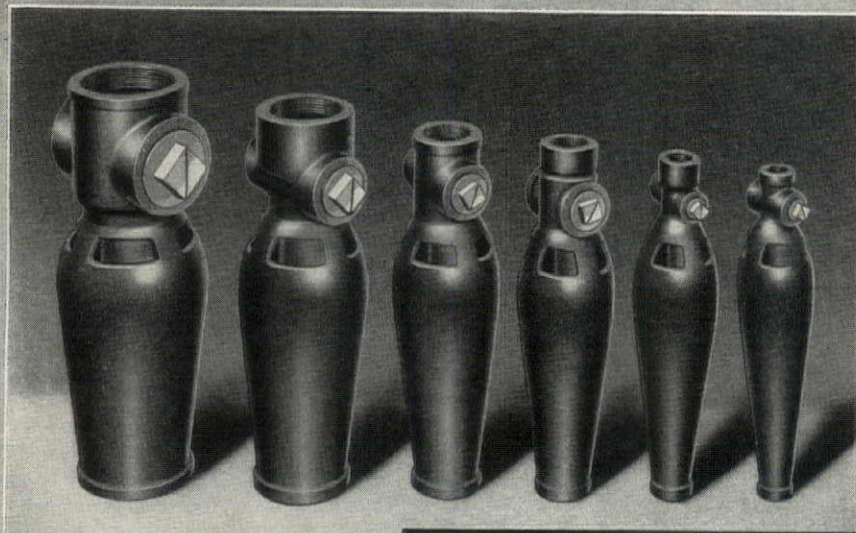
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Here's a Challenge to Every American Architect

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Every responsible architect should get behind the drive to eliminate contamination of drinking water. Protection against pollution in the plumbing systems is vitally important — and the installation of efficient and proven vacuum breakers and fixed air gaps is the one sure means of guarding against interconnections.

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ESTABLISHED 1900

BOOKS

(Continued from page 214)

believe that the shortest road to success is to rob your neighbors. Presenting the group work of a number of eminent Dutch scholars, each of whom reviews Holland's role in the advancement of his particular profession, the editors seek to test the integrity of their country's contribution to the various sciences. By its modesty the book is impressive. Elaborate praise and nationalistic pride are entirely absent. Instead the evaluation is set forth with unassuming and

detached accuracy. Though many of the headings seem rather dry, the book is nevertheless interesting and easily read.

The chapter on architecture, by John C. Kromhout, a Dutch architect and engineer, typifies the general modesty of attitude: "The ten years from the Corn Exchange Building and Kromhout's work to Van der May are taken up by the translation of the former's theories and a rapid evolution of their principal ideas in other countries. This evolution would probably have taken its own normal course and the international importance of Holland's architecture might have played a much smaller role, if

World War II had not interfered, making the work of the men of the Amsterdam School universally prominent and prolific."

It is evident throughout the volume that the Netherlands' traditional policy of tolerance has been an essential factor in the development of its scientific achievements and the text bears out the true meaning of Queen Emma's words. "The Netherlands shall be great in such matters in which a small country can be great."

BUILT IN USA. Edited by Elizabeth Mock. The Museum of Modern Art, New York. Illustrated. 128 pp. 7 x 9 1/2. \$3.00.

This little book is an elaboration on the architecture section of the Modern Museum's anniversary show, *Art in Progress*. When THE FORUM first discussed this show in May 1944 (see p. 81) the editors made the following points: there appeared a tendency to pick names rather than buildings in choosing the examples; some of the selections seemed based on an approach to architecture which considers a building an abstract object rather than a living space. This book raises one additional question which perhaps goes deeper than either of the first: just what has happened to planning in the USA during these years?

The problem of a new esthetic was largely solved many years ago. It is interesting to see that this esthetic has become rooted in the American scene. It is also nice to know that, as on the British Empire, the sun never sets on the Bauhaus. But where is the framework in which this new architecture must grow? Where is Broadacre City or the Ville Radieuse, or whatever one wants to call it? Is it enough to know that a handful of nature lovers can live a la Wright or a la Gropius? We think that the emphasis has shifted. While some have become more interested in the beautiful free shape and the exquisite window detail—a more serious problem, the master plan, has gone down the drain.

This is not the place to offer a solution. It is the place to suggest that the Museum's extremely valuable work might have been directed to better purpose if they had summed up the work and the aspirations of young planners all over the country during the past years—a new pattern of living in the USA—a pattern to which these 47 structures are undoubtedly valuable contribution, but represent only a small part.

NOTE: *Built in USA* will again be available to FORUM readers in November at \$2.40, a 20 per cent discount from list price. Due to the paper shortage only a limited number can be sold in this manner. Checks should be made payable to THE ARCHITECTURAL FORUM.

(Continued on page 222)

Ultra-Modern MARLITE . . .

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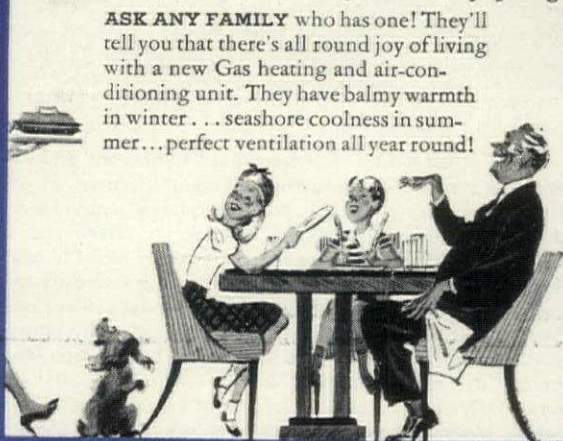
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Another thing trouble-free Gas will bring
Is year-round comfort with freshness of spring!



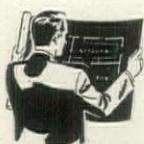
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ON one thing we're all agreed—the lights of industry in this country must die down as little and as briefly as possible, in the turn-back to peace. Getting tools and dies ready—knowing how you'll start, what products you'll make, what materials you'll need—those are patriotic as well as economic necessities *now*, without taking away at all from the first importance of the war.

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matter of materials, that's where we can be of help. Remember that the function of Allegheny Metal, pioneer stainless steel in America, is always to *improve*: strength, service life, cleanliness, appearance—whatever means most in your market. Call on us for any assistance you need. Allegheny Ludlum Steel Corporation, Brackenridge, Pa.

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BOOKS

(Continued from page 218)

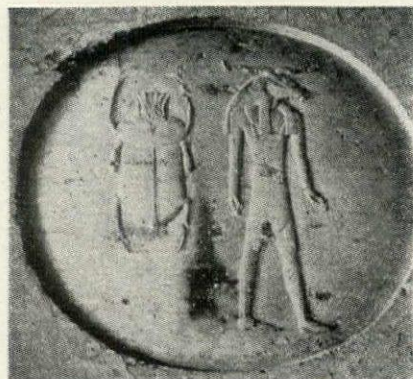
THE ARTS AND RELIGION. Edited by Albert E. Bailey. The Macmillan Co., New York. 167 pp. Illustrated, 24 plates. 5 x 8. \$2.50.

The 1943 Ayer Lectures given at Colgate-Rochester Divinity School make up this book. They deal with religious expression in sculpture, painting, architecture, music and drama. Albert E. Bailey serves as both author and editor; contributing authors were Kenneth John Conant, H. Augustine Smith and Fred

Eastman. As might be expected, Dr. Conant's discussion of religious architecture is at once sensitive and authoritative; imaginative and factual. Mr. Bailey's contribution deals rather harshly with the modern artists, a grudge which, in a similar frame of mind it would be difficult for anyone to overcome. He says: "In any modern exhibition of art, the religious subjects can be counted on the fingers of one hand. The proper subjects for art today are bananas and triangles, or triangles without bananas; one-eyed or three-eyed women flattened by a steamroller and hung up to dry; distortions, fragmentations,



St. Sophia before secularization



Egyptian solar emblems

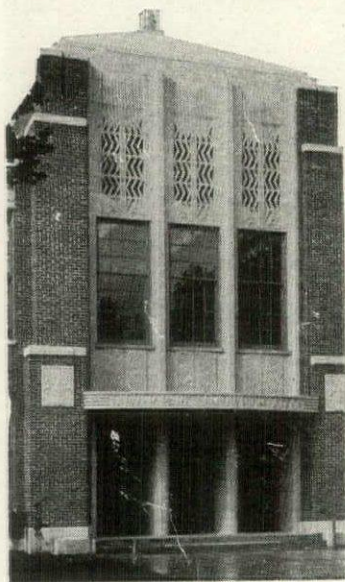
montages, Freudian nightmares in which a horsefly on a plate is Salvador Dali's reminiscence of father. The modernisms of art belong really in the category of technical experiments; through them the artist is feeling his way to a more pungent mode of expression." And that shows pretty clearly where contemporary artists stand in Mr. Bailey's opinion, (his co-authors have been magnanimous enough to repress any similar feelings). Whimsically, however, he claims that all religious symbols in art mirror existing social conditions.

The book has value for students of the ancient arts but its greatest appeal is for those who, imbued with a profound religious sense, seek to understand the basic concepts of ecclesiastic art. Any reader who has notions about art for art's sake will find it a total loss.

WRITINGS ON EARLY AMERICAN ARCHITECTURE. By Frank J. Ross, Jr. The Ohio State University Press, Columbus. 235 pp. 6 x 9. \$2.75.

Started ten years ago as a small index for student's use, this book is the first comprehensive geographic bibliography on early American architecture. It is an excellent tool of research and includes titles of books and articles on architecture published from the Atlantic coast to the western edge of the Mississippi valley.

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FIRE-RESISTANCE (wood vs. steel)

BECAUSE of combustible powders, the fire in this Casein plant at Frankfort, N. Y., was short and hot. Steel roof trusses quickly collapsed. Result—a total loss. But note how this heavy *wood* member, a 12" x 16" nailed, laminated beam, stood up after hours of burning and supported the twisted steel girders.

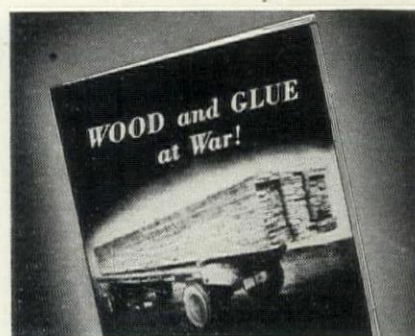
This beam was installed before the development of today's specialized timber-fabricating plants. A modern, glue-laminated member with firestop

inserts and treated or coated with a fire-resistant material would have showed far greater durability.

Wood doesn't collapse. It holds until the cross-section is actually reduced to a breaking point by steady flame. It allows *time*—very often time enough to save the structure. That's why heavy, mill-type wood framing earns low insurance rates.

Specify glued, laminated wood for resistance to fire or water, for low cost, low maintenance, and better

appearance. We will help you make sure it is properly glued.



HOW TO SPECIFY A GLUE

First, determine all hazards the product may encounter. Then, (1) Call in one of our Technical Service men, or (2) Write us for advice, describing your needs, or (3) Write for "*Wood and Glue at War*", a general description of modern glues and their use—and the chart, "*Glue Recommendations for 57 U. S. Government Specifications*," which details the durability of these glues in terms of standard tests.

Address: Casein Company of America, Dept. AF444, 350 Madison Avenue, New York 17, N. Y.

CASEIN COMPANY OF AMERICA • Division of The Borden Company • NEW YORK, N. Y.

CASCO • CASCAMITE • CASCOPHEN
CASEIN UREA-RESIN PHENOL-RESIN

Glues for Industry

Was the roof of tomorrow here yesterday?

The roof of tomorrow

already has a service record!



Present day buildings are benefiting by the service records piled up in past years by roofs made of Koppers Old Style Pitch and Approved Tarred Felt. And buildings of the future will have roofs made of these same reliable materials which are still giving as good performance as when first installed.

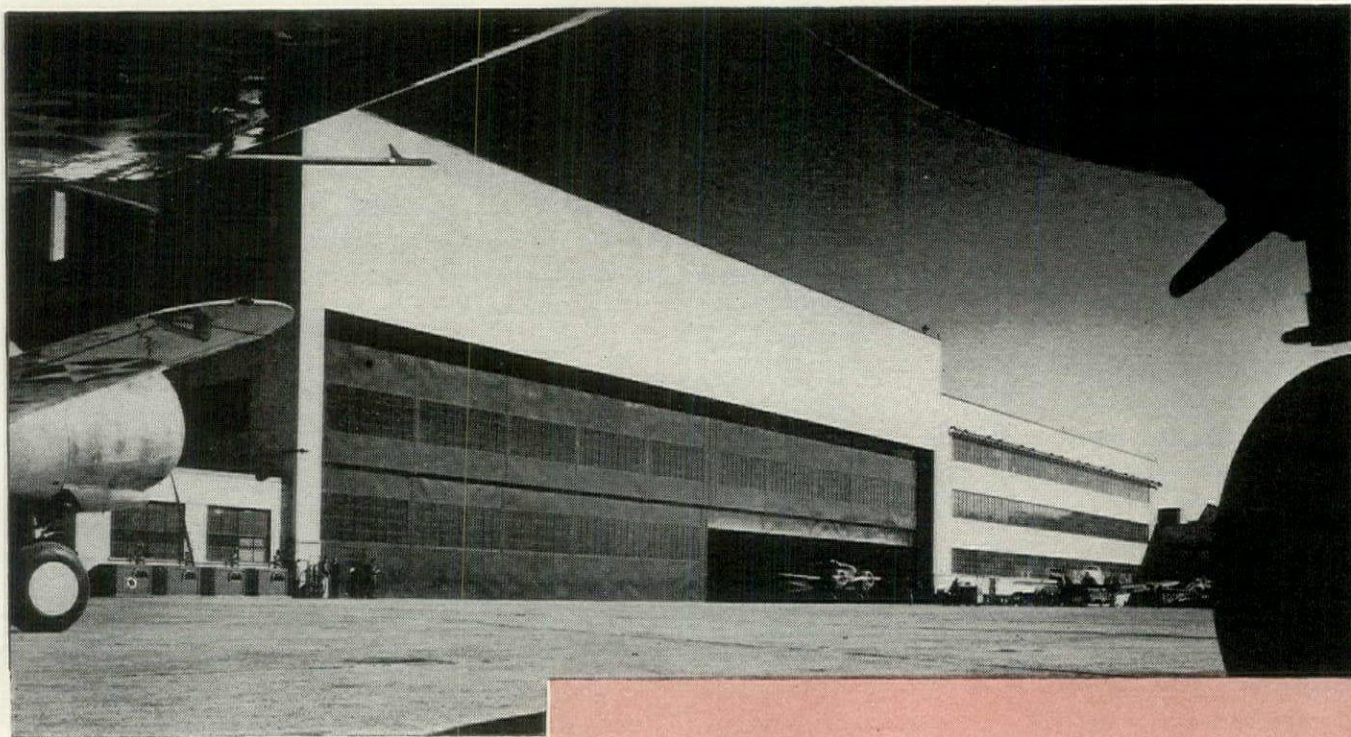
With all the wonderful new products of recent years,

no roofing material has been developed which is an improvement on coal tar pitch. It is long lasting, self-healing, requires little or no maintenance.

Specify Koppers Old Style Pitch and Approved Tarred Felt, and enjoy the good will these Koppers products build over a period of years.—Koppers Company, Tar and Chemical Division, Pittsburgh 19, Pa.



Albert Kahn Associated Architects and Engineers, Inc., Detroit—Architects and Engineers.

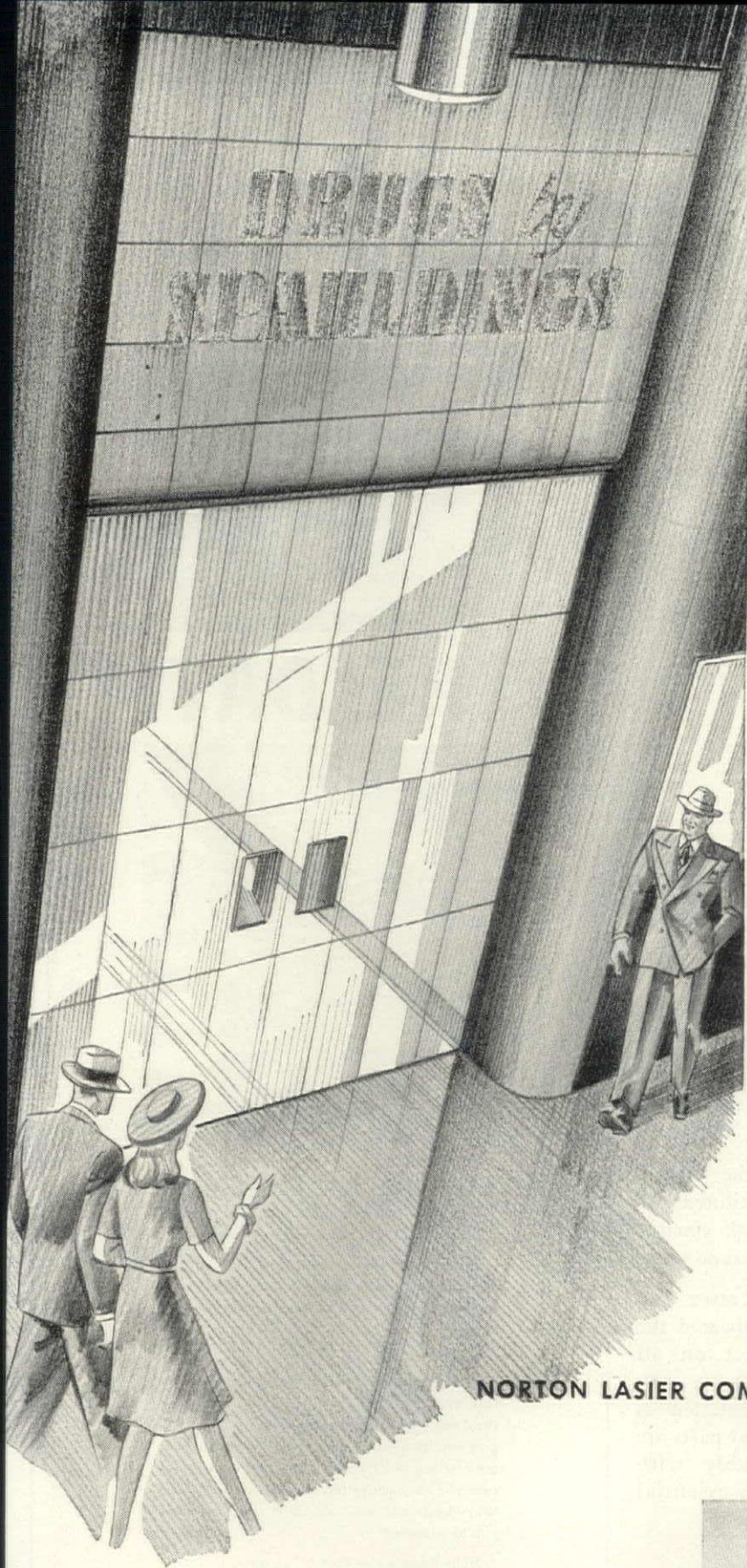


KOPPERS

The industry that serves all industry

KOPPERS *coal tar pitch roofing*

KOPPERS *coal tar pitch waterproofing*



DOORS OF THE FUTURE

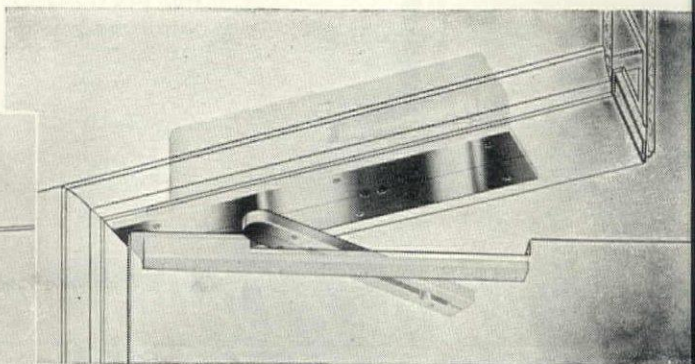
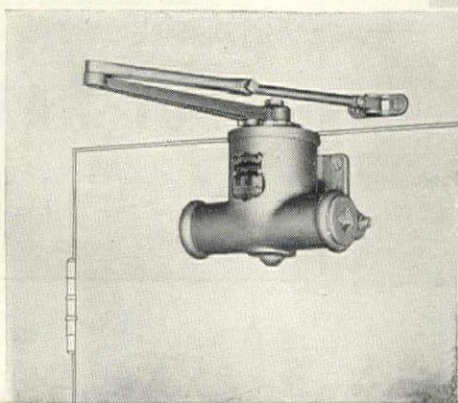
*Must close quietly
... efficiently*

Design and mechanism of
LCN Door Closers will set the
standard for the future,
as they have in the past

NORTON LASIER COMPANY, 466 W. SUPERIOR ST., CHICAGO

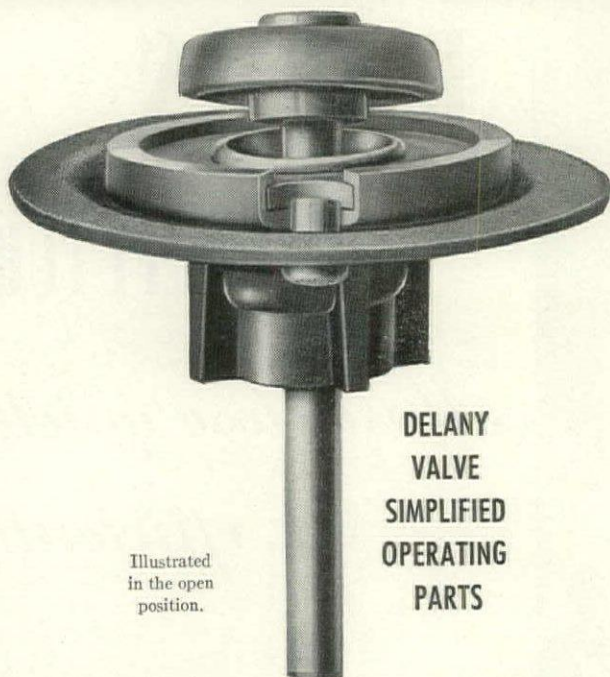


DOOR CLOSERS



Copyright 1944, Norton Lasier Co.

ONLY 6 OPERATING PARTS



Illustrated
in the open
position.

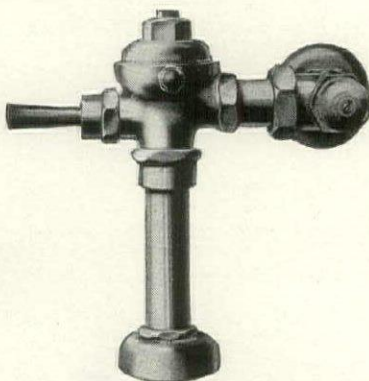
DELANY
VALVE
SIMPLIFIED
OPERATING
PARTS

SIMPLICITY is vital in time of war — less material — less assembly — less maintenance.

The six SIMPLE operating parts illustrated above do the work of upwards of a dozen in the average valve.

The SIMPLICITY of the Coyne & Delany Flush Valve was readily recognized and developed an instant acceptance in all types of war construction.

The SIMPLICITY of the changes made in the Victory model and from tests of the materials substituted, we are convinced that we have added to the high efficient performance record of the Coyne & Delany peacetime valve.



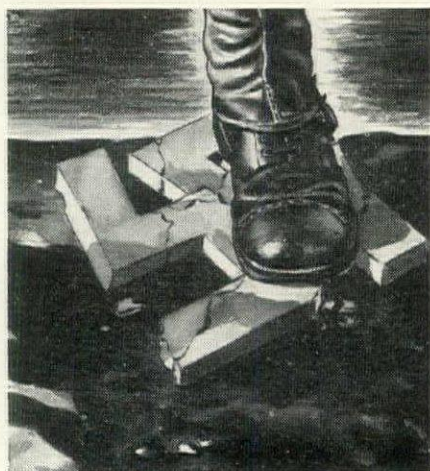
DELANY FLUSH VALVE
equipped with No. 50
DELANY VACUUM BREAKER

This SIMPLICITY concretely has lowered the operation cost on all projects where our valves are installed as all non-critical parts are interchangeable with the previous essential metal parts.

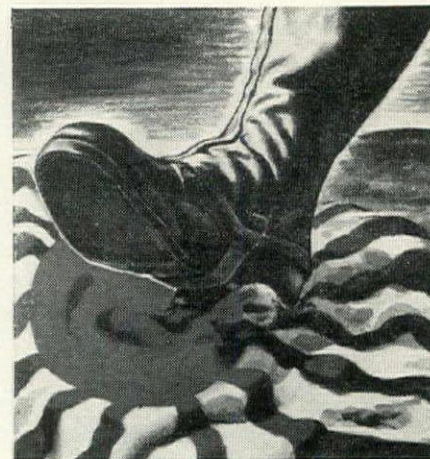
We will be pleased to send you Booklet #D-11 giving complete information.

SINCE 1879
Coyne & Delany Co.
BROOKLYN N.Y.

HASTEN



THE DAY!



YOU can help hasten the day—THE day of final unconditional surrender—by investing your war-time earnings in War Bonds.

Hastening the day means shortening casualty lists. In war, bullets, shells and bombs are exchanged for lives. The War Bonds you buy help pay for the bullets, shells and bombs that will speed the victory.

Your consistent War Bond investments will work for you too at the same time that they work for your boy in service. They will give you that luxurious feeling of freedom that goes with a well-lined pocketbook. For whatever you may desire ten years from now, your War Bonds will add one-third more to what you've invested.

Help hasten the day of victory, and help make that victory more secure—buy your War Bonds today.

BUY WAR BONDS

This is an official U. S. Treasury advertisement—prepared under auspices of Treasury Department and War Advertising Council

**YOUR BEST NEW-BUILDING PLANS
DESERVE *Bathe-Rite*
SHOWER CABINETS**



SHOWER FACILITIES will be on the "must" list of one out of three new-home builders! This *known* demand, plus *taken-for-granted* shower needs on public, commercial and institutional buildings, makes BATHE-RITE SHOWER CABINETS an important factor in your new-building plans.

So, for your own future benefits, and for the satisfaction of your clients, you'll want to check the reasons why BATHE-RITE is the *quality standard* in modern prefabricated shower convenience. Their popularity has always been based on superior strength and durability, greater beauty of design, and a wealth of features that speeds up installation. This combination of advantages recommends BATHE-RITE Shower Cabinets for all your new-building plans.

Learn how Bathe-Rite Shower Cabinets can help you in designing bathing facilities. Write for bulletins, specifications and prices.

MILWAUKEE STAMPING COMPANY

827-S South 72nd Street
Milwaukee 14, Wisconsin

ENGINEERS DRAFTSMEN SALES ENGINEERS SALESMEN SALES AGENTS

WITH experience in the construction industry, especially those men familiar with the engineering, detailing, or sale of these Ceco peacetime products:

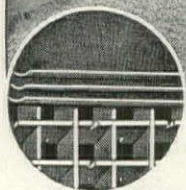
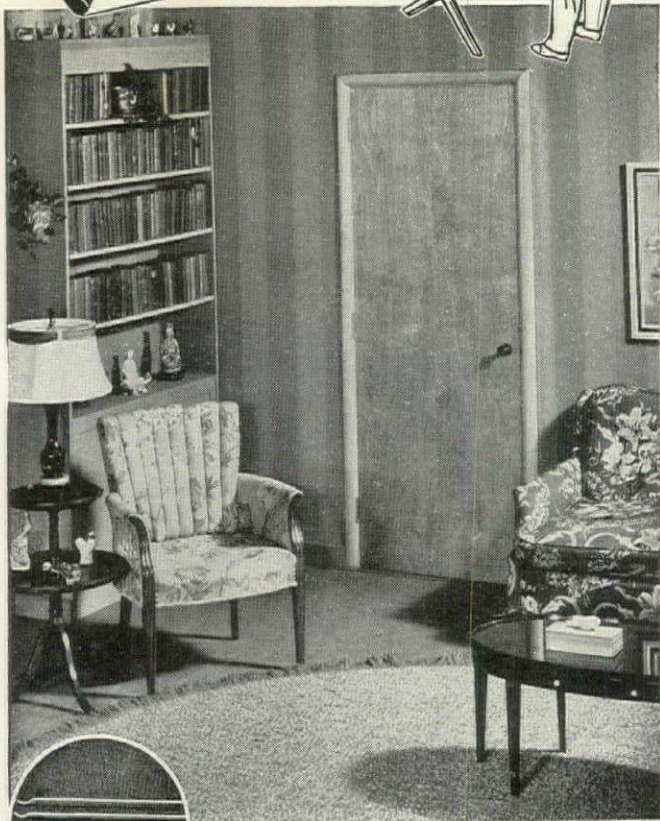
Concrete Reinforcing Bars and Fabrics—
Meyer Steelforms—Shores and Column Clamps
—Steel Windows—Steel Doors—Metal Frame
Screens—Steel Joists—Steel Roof Deck—Metal
Lath—Metal Weatherstrips.

After three years of War Production, we are now anticipating our peacetime requirements for an enlarged engineering and sales organization. We have many excellent opportunities in our Sales Offices, and Fabricating Plants, throughout the country, for men with experience in the engineering, detailing, or sale of our peacetime products.

Address your application to us at Chicago, giving complete outline of your education and experience, location desired, references. All information will be kept confidential.

CECO STEEL PRODUCTS CORPORATION
5700 WEST 26TH STREET • CHICAGO

Plan with PAINE REZO Doors

U.S. Pat. 1,887,814

The exclusive interlocking grid core within the Rezo door provides constant air circulation adds extra strength and greater rigidity.

the air-cell flush door with the greatest experience behind it

Residential construction particularly multiplies the advantages to be found in Paine Rezo doors. In any home they become important decorative elements in themselves, add to the impression of spaciousness. Yet with beauty, they combine patented features in construction that mean no swelling or shrinking, nor future alignment troubles for the lifetime of the building. . . You can specify Paine Rezo doors with confidence, for Paine is no newcomer to flush door manufacture. Back of them is America's largest producer of flush type doors, with a record of nearly half a century of successful installations from coast to coast. Write today for an illustrated, factual bulletin.

Manufactured by the
PAINE LUMBER CO., Ltd. Oshkosh
Wisconsin
ESTABLISHED 1853

SEAPORCEL

porcelain metal
architectural parts

for the STORES and BUILDINGS of TOMORROW

Widely used before hostilities diverted manufacturing to war demands. Now better than ever because of our experience with SEAPORCEL in marine use. Requires only washing with soap and water to restore its original lustre and color after years' service. See Sweet's Catalog for details, 1943, Section 13/9; 1944, Section 6/11.

We're on war
work now — but
ready for peace.

SEAPORCEL PORCELAIN METALS, INC.

28-00 Borden Avenue, Long Island City 1, N. Y.

Formerly Porcelain Metals, Inc.

WANTED MANUFACTURERS' AGENTS

In anticipation of postwar building activity, many progressive manufacturers of building specialties are seeking new representatives, domestic and foreign.

THE ARCHITECTURAL FORUM will be pleased to act as intermediary; agents are invited to register their interest.

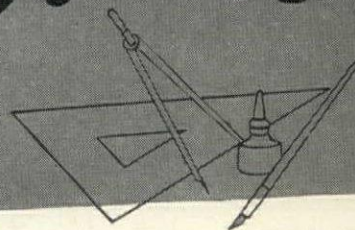
Address George P. Shutt, Advertising Manager

THE ARCHITECTURAL FORUM

19 West 44th Street

New York 18, N. Y.

Plan safer homes...



STRONGER, LIGHTER... WITH STEEL!

You can't beat steel for strong, safe construction. From cellar to attic, steel has no successful rival for long service, for endurance under stress, for speed and economy in erection.

These are some of the reasons why the use of steel equipment and structural members, appliances and accessories in the modern home, seems destined for a sharp increase when restrictions on materials are lifted.

The millions of people who will be building and buying millions of peacetime homes are being reminded that they can have more efficient, more durable homes—for less money—with steel.

Steel keeps the home more beautiful, more fire-resistant, weather-proof—permanently. Steel homes remain in first class shape year after year, practically without replacements, repairs or maintenance.

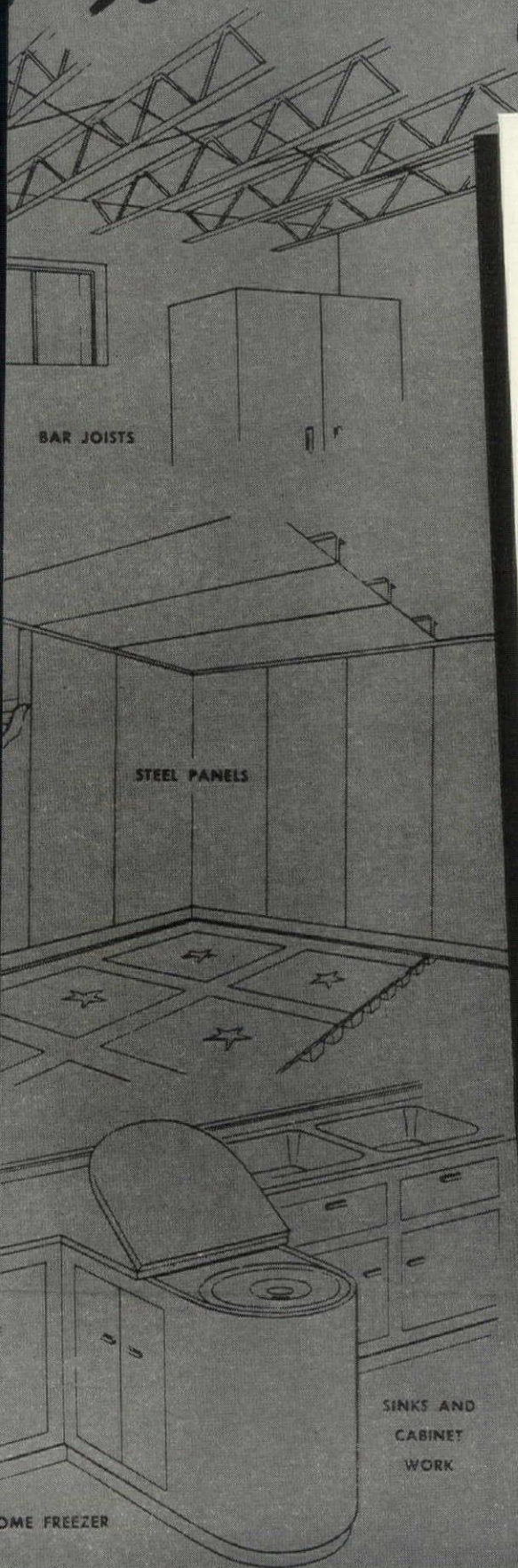
For the widest range of sizes, forms and shapes, architects have long looked to U.S. Steel. Consult our indexed twenty-page insert in Sweet's Architectural File and send for your free copy of "85 Ways to Make a Better Home." You will be reminded of the many places where you will want to include U.S. Steel building products in your plans for postwar buildings. Drop us a line today—you incur no obligation.

U·S·S STEEL SHEETS

CARNEGIE-ILLINOIS STEEL CORPORATION, Pittsburgh and Chicago
COLUMBIA STEEL COMPANY, San Francisco
TENNESSEE COAL, IRON & RAILROAD COMPANY, Birmingham
United States Steel Supply Company, Chicago, Warehouse Distributors
United States Steel Export Company, New York



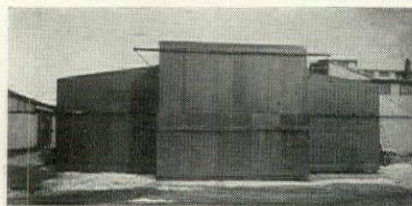
UNITED STATES STEEL



BUILDING REPORTER

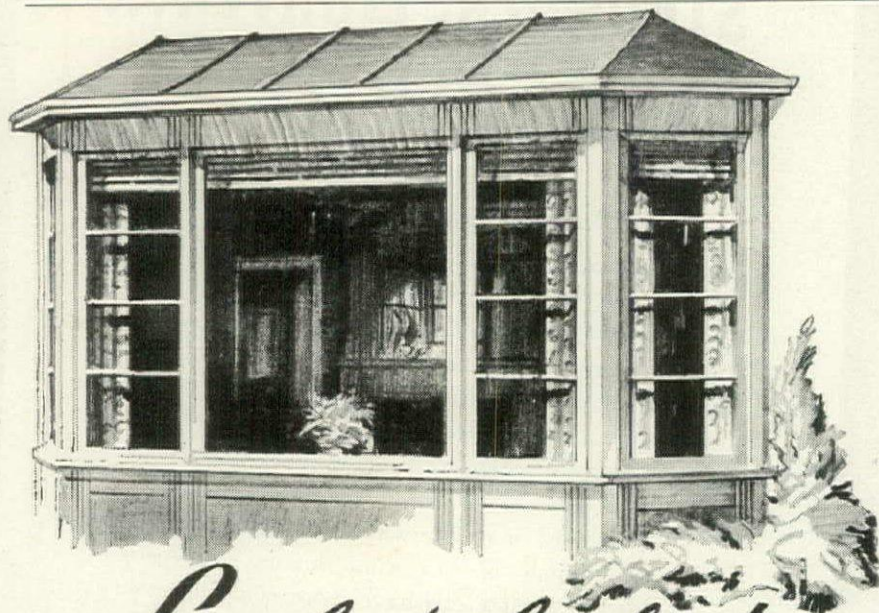
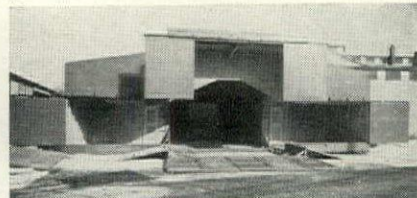
(Continued from page 18)

THIS PREFABRICATED, single-airplane hangar is a light, easily erected inexpensive structure which might well garage the family plane after the war. Developed for the R.C.A.F. by The Halliday Co., Ltd., it meets requirements for a hangar that can be erected in a few hours by a comparatively small crew, and is demountable with sections small enough to fit on a truck. The major problem in designing the hangar was to devise trusses which could carry the



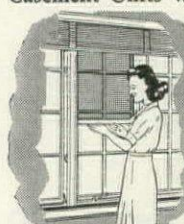
DEMOUNTABLE HANGAR MAY BE PARENT OF FAMILY PLANE GARAGE

roof of the building after the front was removed to allow the plane to enter. The solution is a cantilever truss which carries the load to the rear of the structure and is supplemented by a straight truss over the entire width. This truss is made in separate panels for easy transporta-

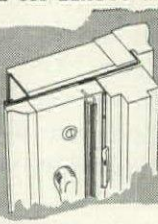


Lovely to look at
yes, and efficient too!

Post-War Window Areas will no doubt be larger. While generous fenestration offers exciting design possibilities . . . WINDOW EFFICIENCY must be examined more critically. Compare these design features of stock-size Pella Casement Units with the field for BEAUTY and EFFICIENCY:



ROLSCREENS, original roller-type inside screens. The ultimate in screen efficiency and convenience.



WOOD and STEEL combine beauty with strength in Pella frames. Wood is toxic and water-repellent treated. Steel is rust-proofed.



DUAL GLAZING is single panel type that mounts on inside of sash. Inconspicuous. Easily removed for cleaning.

Free FILE FOR ARCHITECTS—22 loose pages of scaled details on Pella Casement Units for all types installations. Come in handy A.I.A. File Folder. Send for your FREE set today! Write:
ROLSCREEN COMPANY, Dept. 2104, PELLA, IOWA.



Pella WINDOWS CASEMENT * "AWNING"
PROJECTED WOOD SASH

Made by Makers of Famous Pella ROLSREENS and Pella VENETIAN BLINDS

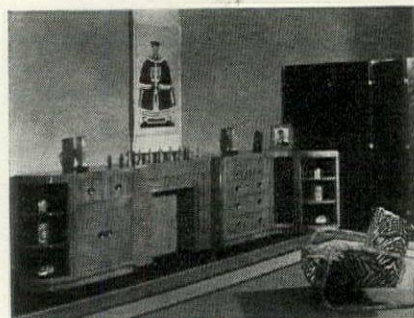
NEW PRODUCTS

SYNTHETIC RUBBER INSULATION for power, lighting and communication cable.

Name: Nubun.

Features: Made by the latex continuous dip method from a special modification of Buna S synthetic rubber, Nubun will permit the design of new types of wire and cable with improved electrical and physical characteristics. Advantages of this new insulation for power, lighting and communication cable include flexibility, impermeability to water, laminated construction, and perfect centering of the conductor to produce an insulated wire of maximum conductivity and minimum diameter. The synthetic insulation is exceptionally homogeneous following vulcanization, and has high electrical characteristics such as dielectric strength and insulation resistance. This special synthetic rubber compound is also low in specific conductive capacity, has good aging qualities and will resist severe wear.

Manufacturer: United States Rubber Co., Rockefeller Center, New York, N. Y.



ALL-LACQUER FINISHES for decorative uses.

Names: Di-Noc, Di-Lon, Di-Noc Sensitized Tracing Cloth.

Features: Di-Noc finish is an all-lacquer film engraved with multiple-color reproductions of wood, marble, fabric, leather or any other material that can be photographed. Made by using a large

(Continued on page 230)

Since 1795 This Endless Search for Perfection



That is why BIRD
has developed
CONTROLLED PRODUCTION
for all building materials

The Bird Tri-Tab Hex Shingle, illustrated above, is more than an excellent building material . . . it illustrates the principle of Controlled Production that has won for Bird a reputation for quality since 1795.

Controlled Production alone makes possible the many qualities Bird has built into this superior shingle. Let's be technical, for a moment. Many of the vital characteristics of a finished shingle depend upon the dry felt base. So Bird operates its own felt plant, carefully selecting and blending raw materials for the felt—because *blended felt* wears better. The "felting" is done by a machine designed to lay the felt fibres in a criss-cross pattern which gives the felt great strength both with and across the grain, and increases its asphalt absorbency for complete saturation. Every step is controlled, subject to constant inspection.

The waterproofing asphalts, too, are controlled—from petroleum oils, selected by Bird, refined by a special process to Bird specifications, with final treatment in

Bird's own stills and kettles.

Bird shingles are further fortified against weather by oil treated mineral granules, washed free of all dust with an oil bath that primes the surface of the granule for positive adhesion in the asphalt. Such a shingle is fire resistant, as evidenced by the label of the Underwriters Laboratory.

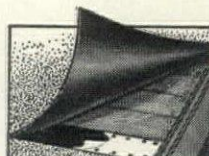
Now note the design. The smaller Tab, only 4 inches in depth, was scientifically determined, to lay snug in windy weather. Nails are distributed more evenly on the shingle, adding greater holding power. Distinctive colors and blends which add such striking beauty, are exclusively created in Bird laboratories.

There are quicker, easier, cheaper ways to make a shingle. But Bird . . . in its endless search for perfection . . . builds quality through and through—the quality which architects, builders and property owners recognize as indicative of Better Building Products for home and industry.



Other excellent examples of Controlled Production:

1. Bird Master-Bilt Weather-Tex Shingles for homes: with longer life, more massive appearance, and a rare charm of modern colors.
2. Bird Proslate: a better roofing for farms and industry: double locked onto buildings with concealed nails and tornado-proof cement.



FOR HOMES



ASPHALT SHINGLES • INSULATED SIDINGS
INSULATION BOARDS • FLOOR COVERINGS
WALLBOARDS • BUILDING PAPERS

SINCE 1795

*Men who know
the best know*

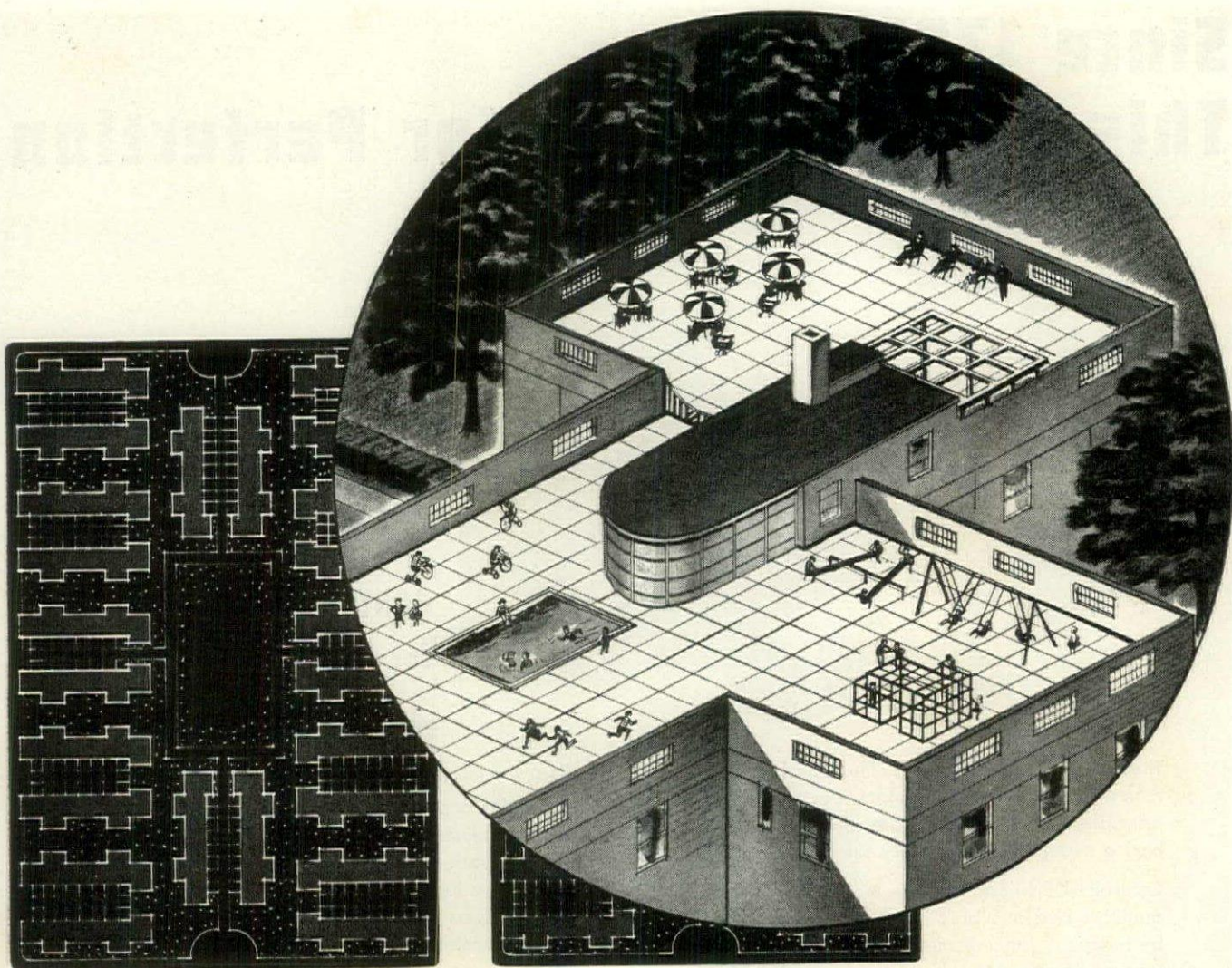
BIRD

FOR INDUSTRY



RUBBERLIKE FLOOR RUNNERS • INDEX
PRESSBOARDS • SHIPPING CONTAINERS
SHOE CARTONS • BUILT-UP ROOFS
BIRD-FIBRE WOOD FRAME CASES

Bird & Son, inc. • East Walpole, Mass. • New York • Shreveport, La. • Chicago, Ill.



public housing in 194X

Public housing that utilizes the now wasted roof areas for parks and playgrounds is featured in the project by architect Charles C. Platt, of F. P. Platt & Bro., New York. His plan permits more buildings, lower buildings, and cheaper buildings for the same plottage.



Where land costs have forced public housing into six- to thirteen-story, 60-year duration buildings, greater utilization of roof areas makes possible the same housing in four-story, 20-year buildings. Such buildings come within a more economical category of construction, and permit the projects to be written off and ready for replacement in a shorter time. The "living pattern" is not frozen over a long period of time, nor is the "City Plan" program

hampered by a series of super-blocks incapable of relocation.

For low-cost housing, as for other types of buildings, Barrett Specification Roofs are becoming increasingly important in the post-war plans of leading architects and builders. Because of their extreme adaptability, these famous coal-tar pitch and felt roofs provide the maximum of dependable, long-lasting waterproofing and weather-proofing protection under almost any conditions.

THE BARRETT DIVISION ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR STREET, NEW YORK 6, N. Y.

2800 So. Sacramento Avenue
Chicago 23, Ill.

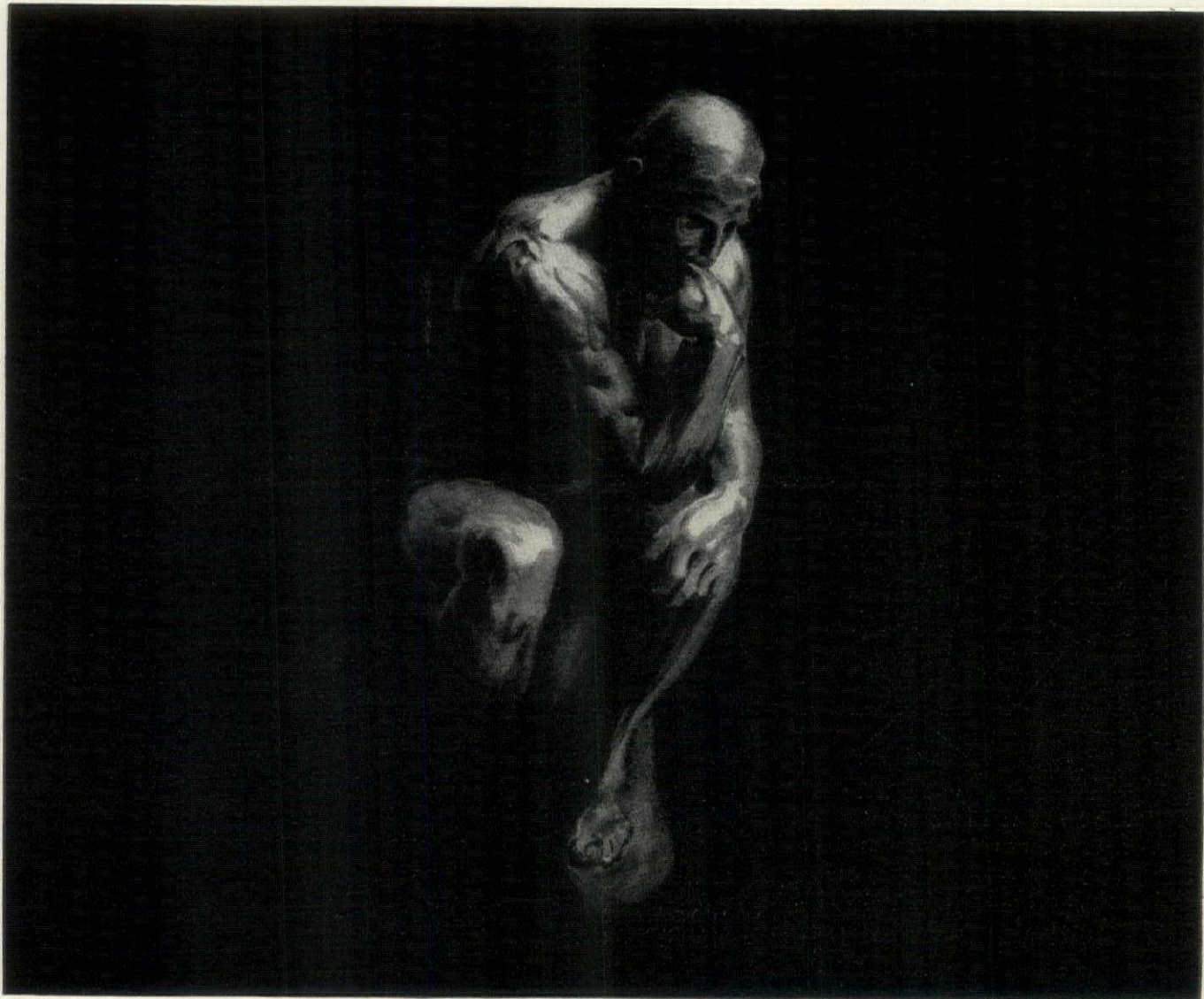
Birmingham
Alabama

In Canada: The Barrett Company, Ltd.,
5551 St. Hubert Street, Montreal, Que.



The public housing development here is ninth in the Barrett series of designs by outstanding American architects devoted to functional planning in roof architecture. You are invited to write today for reprints of the complete series for your files.

• Reg. U. S. Pat. Off.



Rodin's "Le Penseur"

EMPLOYMENT that results from expressing and utilizing ideas for the betterment of mankind is founded upon principle and must, from the very nature of its unlimited source, continually unfold productive, self-respecting jobs for men of many skills. Ideas now unfolding to engineers and architects for building of the future provide assurance of gainful employment for millions of men. Ideas, not billion dollar appropriations, make employment.

In its specialized field, the Zurn Organization is researching, inventing, designing, making and testing one device after another in a continuous endeavor to improve building and plumbing drainage systems. The inspiring idea is to supply Engineered Protection for Human Health and Modern Structures. Although

giving its utmost to the war effort, this organization has its vision fixed upon the requirements of the structures of tomorrow, in which it perceives a productive, self-respecting job for every one of its employees and for several million others who will serve the building and construction industry.



Now available upon request: "A New Era For Building is Only Marking Time", a presentation of some influences which may affect the planning of construction in the immediate future.

Form No. 44-71

J. A. ZURN MFG. CO. ★ ERIE, PA., U.S.A.



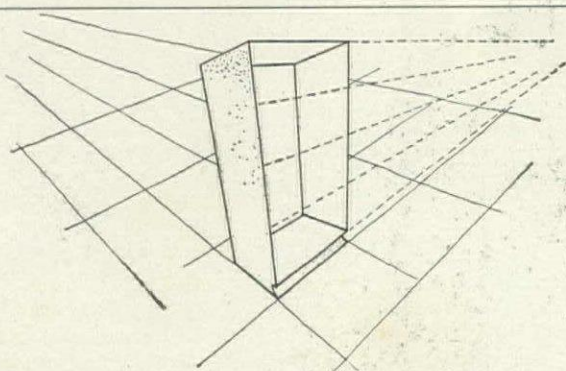
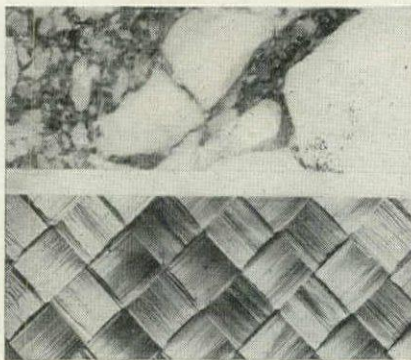
BUILDING • PLUMBING DRAINAGE PRODUCTS

BUILDING REPORTER

(Continued from page 226)

color separation camera, Di-Noc preserves the original detail on a cellulose-lacquer film, which is then fused to a light but rigid backing. This becomes the actual finish. Since it is an all-lacquer preparation, Di-Noc becomes an integral, permanent part of the steel, wood, plastic or wallboard to which it is applied. Paneling and other interior finishes in such exotic materials as zebrawood, snakeskin, woven rattan or swedish green marble can be inexpensively created with this material. It is

permanent, sanitary, unaffected by grime, light or stains, and will neither deteriorate nor become disfigured.



MODULAR

Based upon the philosophy that a store building is essentially a shelter for a merchandising operation, we advocate an early discussion between the architect and the supplier of equipment.

For years we have collaborated with architects in arranging the mechanics for retail selling.

We believe that standard equipment for selling has the same application as elevators, escalators, cash registers or any other unitized system—that such unitized equipment can be integrated with room design without detracting from the individuality reflected in that design.

The interest of the architect in the application of our products to his designs is solicited.



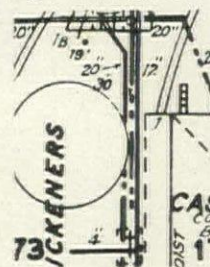
GRAND RAPIDS STORE EQUIPMENT CO.

Main Offices and Factories, Grand Rapids, Michigan—Portland, Oregon and Los Angeles, California
Offices and Showrooms, New York, Chicago, Pittsburgh, Memphis

Representatives in Principal Cities — Consult Phone Book

Di-Lon is the engraved, multiple-color, Di-Noc film with an added backing of durable paper. This product, which features the same reproductions of luxurious marbles, woods and skins, can be applied like an ordinary wall covering at comparable cost. Most subjects are available in a triple roll, washable, waterproof and lightfast.

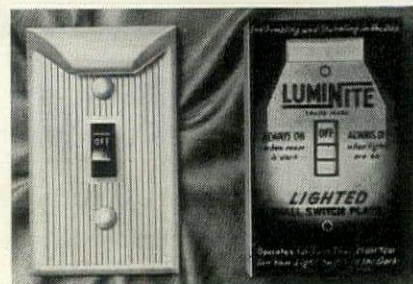
Di-Noc Sensitized tracing cloth is furnished in two grades, # 67 for contact printing, and # 85 for projection printing. Both grades are made from the



highest quality tracing cloth obtainable. Contact grade # 67 has been sensitized with an ultra-slow, fine grain, orthochromatic emulsion which, on development, yields intense

opaque blacks. Projection grade # 85 is coated with an orthochromatic emulsion of suitable speed and contrast for all projection work. The emulsion face on the reproductions has a semi-matte surface which is ideal for penciling, inking, or typing. With the Di-Noc method, original drawings can be filed away, and sensitized tracing cloth reproductions used for ordinary purposes. Developed copy on sensitized tracing cloth will not smudge.

Manufacturer: The Di-Noc Mfg. Co., 1700 London Rd., Cleveland, Ohio.



LIGHTED WALL SWITCH PLATES operate for less than two cents a year.

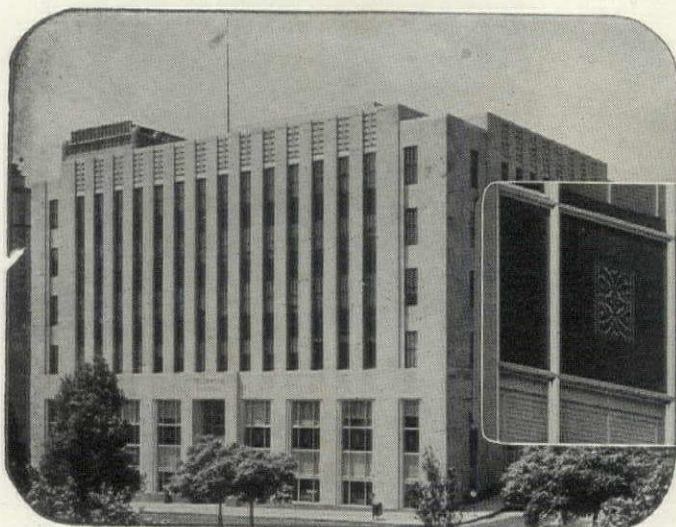
Name: LumiNite Wall Switch plate.

Features: This electrically lighted wall switch plate features a tiny shielded light that automatically comes on when room lights are turned out, and remains off whenever room lights are burning. It locates the switch in the dark avoiding smudges on the wall, and acts as a pilot light at night. The plate is a single piece of molded ivory plastic, at the top of which is the housing for the fractional-wattage glow lamp and mechanism. The bulb is said by actual tests to operate at the low cost of less than two cents a year for current, and by minimizing the heat factor of the bulb, long service life is attained. The units fit any

(Continued on page 234)

Seamen's Institute, Brooklyn, N. Y., →
Henry V. Murphy, Architect. Sand-
blasted Black Serpentine spandrels
on street sides of building show ap-
propriate maritime subjects.

Close-up of one of the deco-
rative Black Serpentine spandrels,
Seamen's Institute.



Chesapeake and Potomac Telephone Company Build-
ing, Baltimore, Md., Taylor and Fisher, Architects. Note
sand-blasted Black Serpentine spandrels in lowest row.

Close-up showing use of sand-blasted
design for contrast and enrichment.

Sand-Blasting Opens NEW VISTAS of Decorative Utility for BLACK SERPENTINE

The wide range decorative possibilities in sand-blasted ALBERENE Black Serpentine is demonstrated in the spandrels, designed for Catholic Seamen's Institute, Brooklyn, N. Y., Henry V. Murphy, Architect, and those for Chesapeake and Potomac Telephone Company Building, Baltimore, Md., Taylor and Fisher, Architects. These are typical of the many new treatments and interesting finishes that ALBERENE has developed for the enrichment of current and post-war buildings.

Wherever design calls for stimulating contrasts or accents, Black Serpentine is

preeminent... a most practical choice from the standpoints of economy and availability. So dense and tough is this stone that it may be cut as thin as $\frac{7}{8}$ ", and its durable polish is lustrous but non-reflective.

A request on your business letterhead will bring samples, conveniently boxed, of Black Serpentine, Tremolite Green and our mottled blues and greens. Please address Alberene Stone Corporation of Virginia, 419 Fourth Avenue, New York 16, N. Y. Quarries and Mills at Schuyler, Virginia. Sales offices in principal cities.



Alberene

BLACK SERPENTINE

PERMANENT, NON-REFLECTIVE; ECONOMICAL

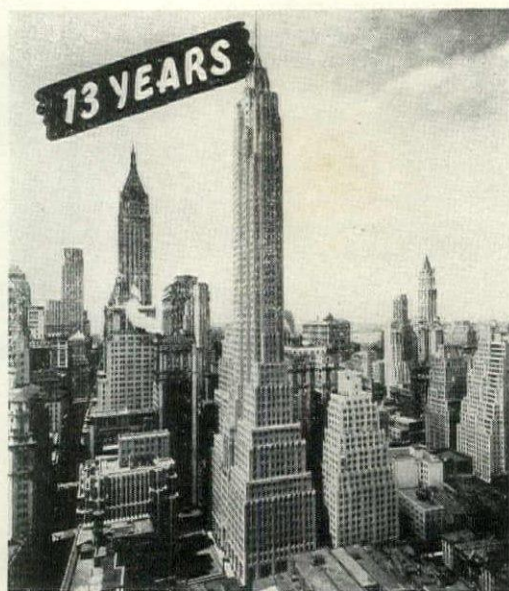
MINWAX CAULKING COMPOUNDS

deliver years of trouble-free protection

at lowest cost per year of service

IN planning modernization and remodeling projects, a check of the condition of the caulking is essential to prevent leakage, rust and heat loss. While the over-all cost of this caulking is small, the cost of damage and heat loss caused by neglected or short-lived caulking may be large. Thus the use of an efficient, long-lived caulking compound is essential, and while MINWAX Caulking Compound costs a little more per gallon, its proved permanence will deliver freedom from worry over weather damage, heat loss, and replacement costs *at lowest cost per year of service.*

PROOF OF THIS PERMANENCE is performance on projects like that illustrated here, and on others 3 to 9 years old reported in Pittsburgh Testing Laboratories report of job inspections. On these buildings, MINWAX Caulking Compound was reported as "performing its functions and not in need of replacement". Send for your copy of the Pittsburgh Report and the new booklet, "Weather-proof Caulking". Write MINWAX Company, Inc., 11 West 42nd Street, New York 18, N. Y.



CITIES SERVICE BUILDING, New York City.—After 13 years of service, the original Minwax Caulking Compound around the tower windows was replaced with more Minwax. On the remainder of the building the Minwax Caulking Compound is still in good condition.

For the 27th Consecutive Year, our Complete Catalog is in Sweet's
BUY BONDS! MORE THAN BEFORE!

**Waterproofings
Caulkings
Dampproofings**

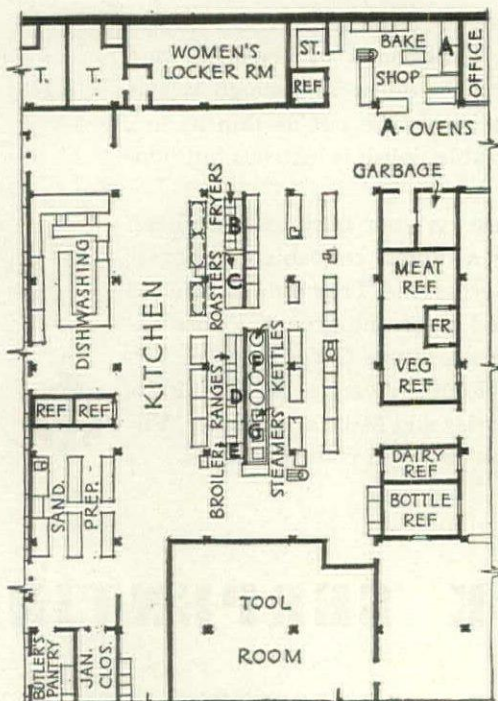


**Wood Finishes
Waxes
Protective Coatings**

COMPLETE CATALOGS IN SWEET'S

SPECIALIZED COOKING TOOLS

Adapted To Your Needs



*Designed by Albert Pick Co., Inc.
for The Austin Company*

This mass food-producing unit is installed in a unique "breathing walls" and "controlled conditions" motor plant in the mid-west, where it feeds thousands daily. Blodgett "specialized equipment" takes care of this kitchen's roasting and baking needs—as in small and large food kitchens all over the U. S. A.

THE TWO No. 952 BLODGETT OVENS here provides 37.2 sq. ft. of shelf area in four separate 12"-high compartments, and will load more than 600 lbs. THE TWO No. 982 BLODGETT BAKE OVENS have 16-pan, 96-pie capacity, in four 2-deck sections. Roasting ovens are used for meats, fish, vegetables, beans, puddings, etc.

COOKING EQUIPMENT USED
(a) 2 No. 982 BLODGETT GAS-FIRED BAKE OVENS
(b) 6 Fryers
(c) 2 No. 952 BLODGETT GAS-FIRED ROASTING OVENS
(d) 6 Ranges
(e) 1 Broiler
(f) 4 Stock Kettles
(g) 3 Steamers

Write today for "Case Histories of Successful Mass Feeding Operations," "The Role of the Roasting Oven in Mass Feeding" and "Meat Cookery in Wartime."

The G. S. BLODGETT CO., Inc.,
53 ROY STREET, BURLINGTON, VERMONT



THEIR POST-WAR HOME WILL TURN OUT TO BE A "WHITE ELEPHANT"

... don't let it happen to you!



LIVING ROOM SETTING BY JAS. McCREERY & CO., NEW YORK

BITUMINOUS COAL INSTITUTE

60 EAST 42ND STREET, NEW YORK 17, N. Y.

(This is one of a series of advertisements now appearing in home-makers' magazines)

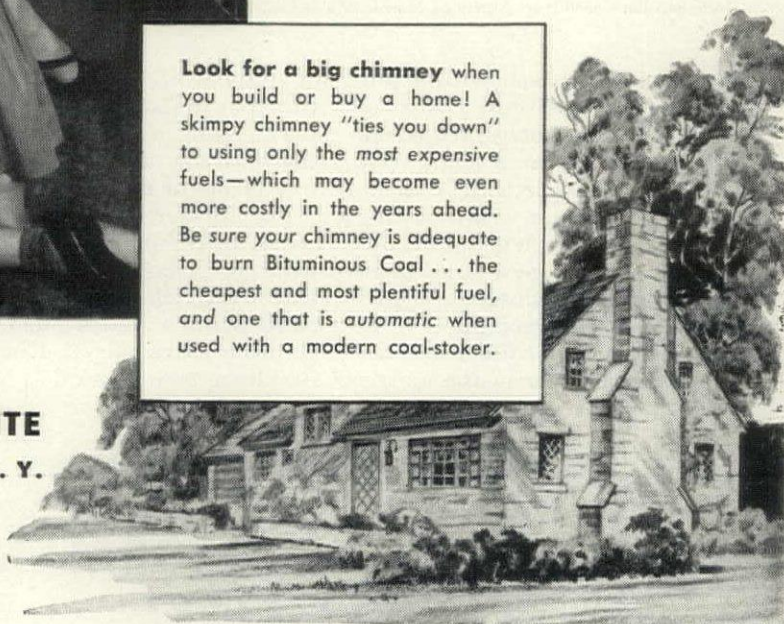
● The most attractive post-war home can become a "white elephant" if its chimney is too small to handle all fuels equally well. Such a house may prove very *uneconomical to heat*. And fuel bills can be far more than your taxes—or mortgage interest!

Make Sure You've Got an Adequate Chimney

To take care of *all* fuels properly, your house needs an *adequate* chimney... a chimney that is *large enough* to handle gas, oil, or coal equally well. The extra cost of building such a chimney when you plan your house is small. And doing so will give you freedom of choice to heat with *any* fuel—including, of course, Bituminous Coal—the fuel that is by far the cheapest—that 4 out of every 7 homes in the United States depend on for steady, reliable heat.

Your architect or builder will tell you that a chimney adequate for burning Bituminous Coal is also efficient for any other fuel you ever might choose. Talk it over with him—it will pay you to do so!

Look for a big chimney when you build or buy a home! A skimpy chimney "ties you down" to using only the *most expensive* fuels—which may become even more costly in the years ahead. Be sure your chimney is adequate to burn Bituminous Coal... the cheapest and most plentiful fuel, and one that is *automatic* when used with a modern coal-stoker.



BUILDING REPORTER

(Continued from page 230)

standard switch, and work equally well in three- and four- way switch arrangements. Installation is accomplished by simply connecting two wires to the terminals found on the switch.

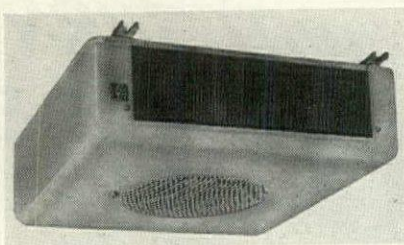
Manufacturer: Associated Products Co., 74 E. Long St., Columbus 15, Ohio.

AIR COOLERS for improved cleanliness and sanitation.

Name: Spasaver.

Features: These ceiling type horizontal coolers, housed in streamlined white

enamel cabinets, are suitable for all refrigerants, and ready for installation. They are designed for use in institutions,



restaurants, food processing plants and similar places where cleanliness and sanitation are of great importance.

COLORFUL, DURABLE TERRAZZO FLOORS BRING MORE BUSINESS INTO STORES



Terrazzo entrance floor made with Atlas White cement used in remodeling the Wm. H. Block Department Store, Indianapolis, Indiana. Architects: Vonnegut, Bohn & Mueller, Indianapolis; Contractor: American Mosaic & Tile Co., Inc., Louisville, Ky.

EXPERIENCE has shown that fine Terrazzo will resist years of wear and save money on upkeep.

But fine Terrazzo made with Atlas White portland cement offers more than wear-resisting floors. It offers you unlimited opportunities for new and more decorative floor designs. It permits accurate reproduction of any colors and color combinations desired. For in the matrix

of Atlas White cement, whether tinted or in its natural white, lie the blending or contrasting overtones which assure the clear, true colors of fine Terrazzo.

For further information, see Sweet's Architectural File, or write to Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N. Y.

The matrix is as important as the marble chips

AP-T-4



ATLAS WHITE CEMENT
for FINE TERRAZZO

Models in ten different sizes are available, and are applicable to a wide variety of installations from back bars to large cold rooms. Equipped with new type propeller fans, the units operate with practically no noise. Coils are of the fin and tube type, equipped with D & H kinetic type refrigerant distributor. Motors are slow speed totally enclosed ball bearing—115 v., single phase, 60 cycle—and require no lubrication after leaving the factory.

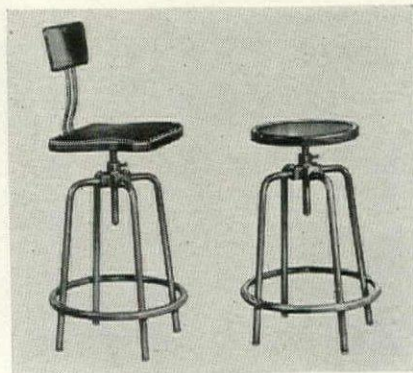
Manufacturer: Drayer - Hanson, Inc., 738 East Pico St., Los Angeles 21, Cal.

FLOW CONTROL for grease interceptor.

Name: Flo-Trol

Features: A new automatic flow control designed to prevent waste water passage in volume above the rated capacity of the interception chamber has been incorporated into the Zurn Greaseceptor, a device for the interception, separation and recovery of waste-water grease threatening interior drainage lines. Features claimed by the manufacturer include a fitted gate for optimum flow rate, a touch control handle for flush-cleaning, internal expanding walls which insure free flushing of trapped solids, elimination of all waste spillage during cleaning and no maintenance or replacement of parts.

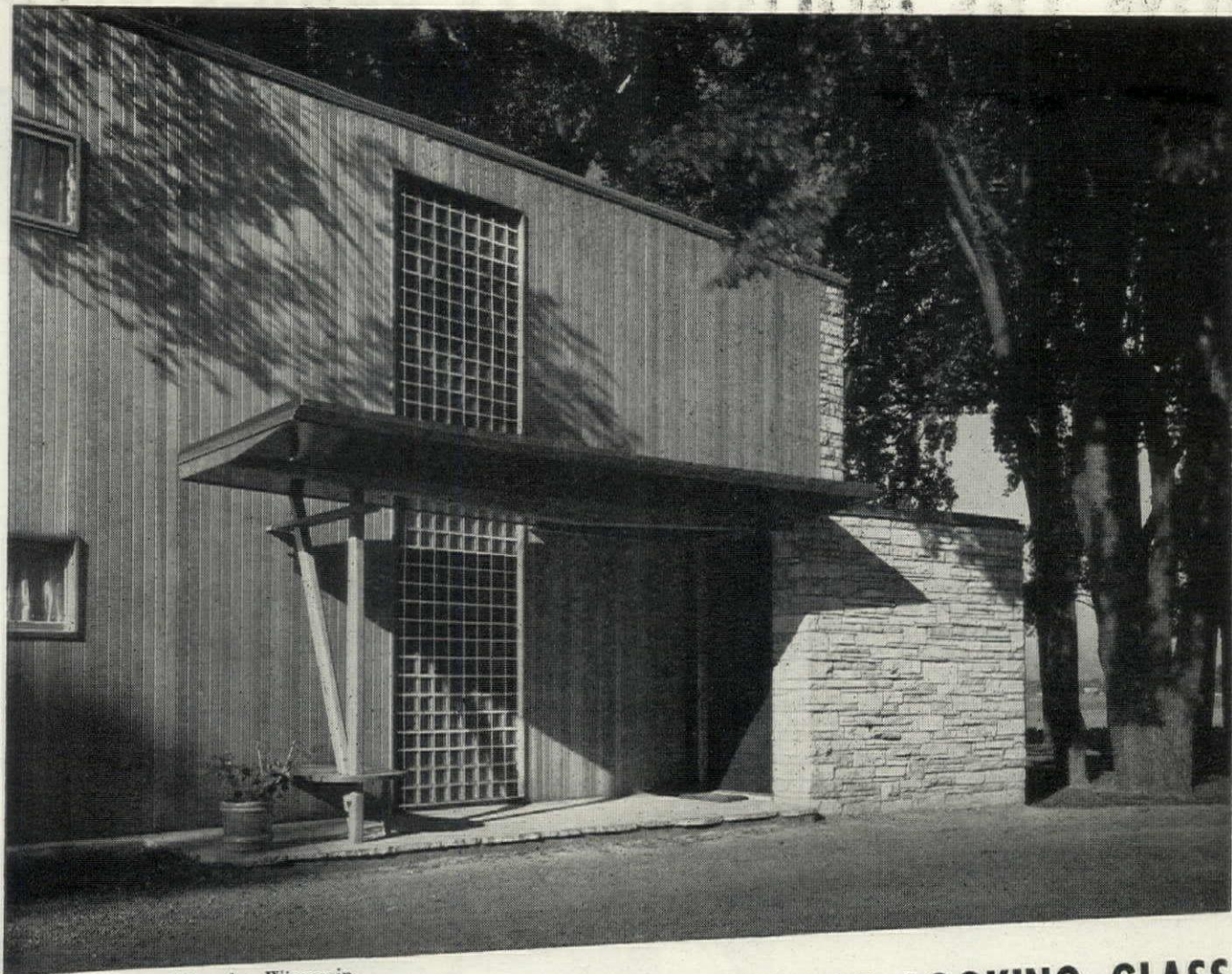
Manufacturer: The J. A. Zurn Mfg. Co., Erie, Pa.



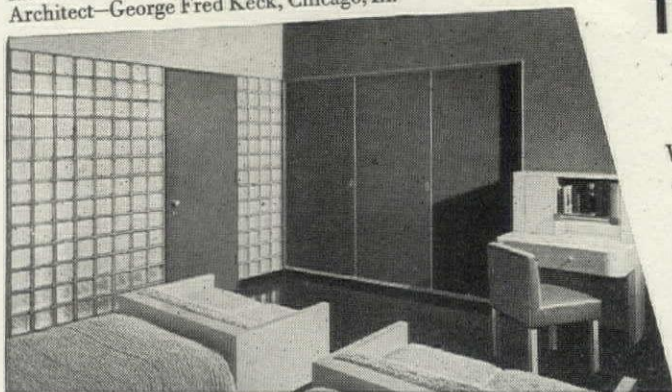
STEEL CHAIRS AND STOOLS of new design.

Features: A new line of all-welded, tubular steel chairs and stools available at present in a variety of swivel, adjustable and non-adjustable models has been designed to replace the angle steel chair sold before the war. The new construction features a modern, all-welded tubular steel frame to provide the greatest possible strength. Protruding bolts have been eliminated, and the chairs finished in enamel. Adjustable models have been greatly simplified, having but one bolt adjustment which is made by means of

(Continued on page 238)

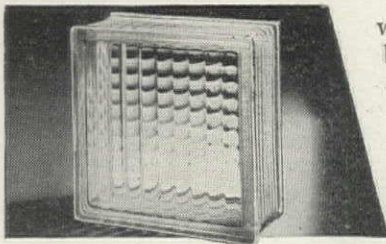


Kellett Residence, Menasha, Wisconsin.
Architect—George Fred Keck, Chicago, Ill.



Cohn Residence, Lake Forest, Illinois. Architect—George Fred Keck, Chicago, Ill.

Insulux Glass Block is a functional building material—not merely a decoration. It is designed to do certain things that other building materials cannot do. Investigate!



Modular Planning for Coordination

Owens-Illinois was one of the first to recognize the advantages of modular design in home construction. All sizes of Insulux Glass Block are made in dimensions that fit into the standard 4-inch module.

THROUGH THE LOOKING GLASS *of Tomorrow*

What will the postwar house be like? Nobody knows — *exactly!*

One thing is certain! The House of Tomorrow will be designed for better living and will make full use of our wonderful new building materials. Plastics—plywood—cork—synthetic rubber—light metal alloys—glass and glass block!

Many of the new houses will display lustrous, light-flooded panels of Insulux Glass Block.

Panels of Insulux can be used to brighten an entry way or to add new beauty to a kitchen, living room, bedroom or bath.

Insulux Glass Block is a practical building material. It transmits light. It keeps out noise and dirt. And it is easy to clean—and to keep clean.

See our section in Sweet's Architectural Catalog, or write: Insulux Products Division, Dept. 78, Toledo, Ohio.

OWENS - ILLINOIS

INSULUX

GLASS BLOCK

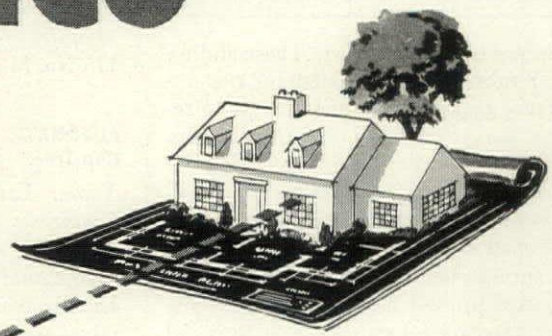
HOW THE GOLDEN GATE BRIDGE HELPED

The Golden Gate Bridge, world's largest span, was finished in 1937 — Into it went over 100,000 tons of steel. 80,000 miles of steel wire in the two great cables alone. Ceco provided 1,800 tons of special steel floor trusses on which the six lane roadway was laid.



ENGINEERING

TO MAKE A BETTER CECO WINDOW

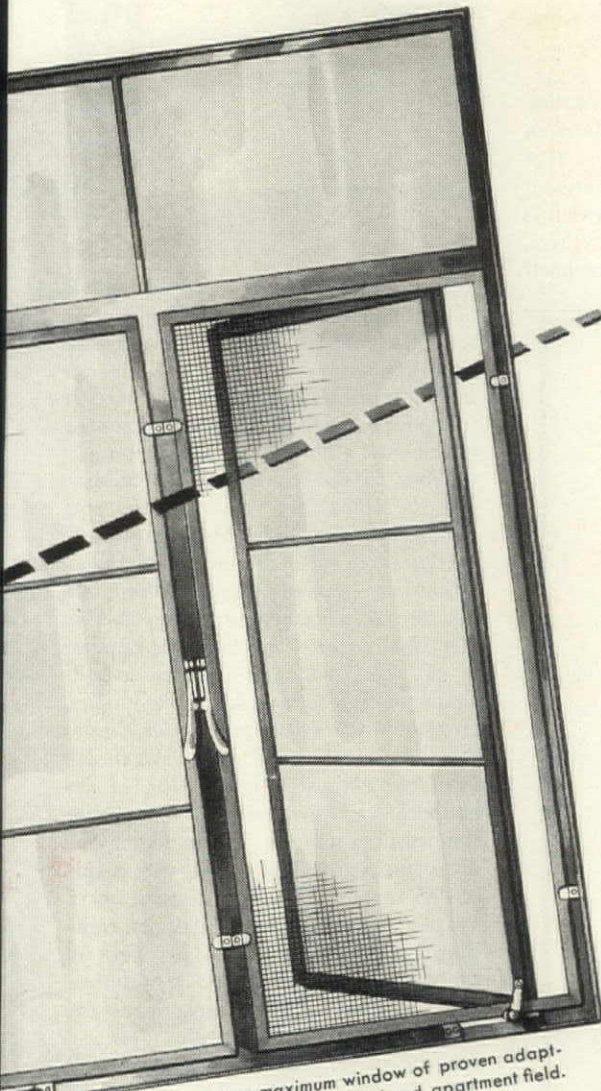


THE ANSWER LIES IN ONE WORD . . . ENGINEERING.

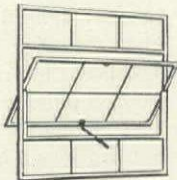
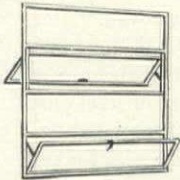
The great six lane roadway that stretches out across the bay required engineering with unusual precision . . . Suspended 220 feet above the bay it must withstand the tremendous stress and strain of great wind and heavy traffic, must fit to the fraction of an inch to carry year after year its terrific load. This roadway was laid on 1,800 tons of special steel floor trusses designed and supplied by Ceco—a job that took precision fit and skilled engineering.

The Ceco Steel Window, like the Golden Gate Bridge, is precision built, is durable, is beautiful . . . for men who work on monumental structures build "small" with the same engineering precision they build "big."

This gives the Ceco window advantages in operation and installation, a perfect weather tight seal under all conditions, longer life, and greater beauty. For *home builder* or *bridge builder*, Ceco construction products and Ceco Steel Windows do a better job—through better engineering.



Residential Casement—a sun-maximum window of proven adaptability to all types of architecture in the residential and apartment field.



Ceco's line of Steel Windows includes Light and Intermediate Casements, Basement Windows, Architectural Projected, Commercial Projected and Pivoted Windows, Continuous Windows, Security and Utility Windows, Mechanical Operators, etc.

OTHER CECO ENGINEERED PRODUCTS:

All types of Steel Doors, Metal Frame Screens, Metal Lath, Metal Weatherstrips, Steel Joists, Steel Roof Deck, Meyer Steelforms, Adjustable Shores and Clamps, Concrete Reinforcing Bars and Welded Fabric.

CECO STEEL PRODUCTS CORPORATION

General Offices: Omaha, Nebraska

Manufacturing Division: 5701 W. 26th St., Chicago, Ill.

What the CECO engineered window means to Architect, Builder and Home Owner

1. Precision Engineering means an extra tight all weather seal—keeps out cold, dust, rain—keeps heat in.
2. Precision Engineering means easy opening, and closing—no sticking, warping, or swelling. Ceco Windows always fit.
3. Precision Engineering means a far greater light area, lets more sunlight in, easier to see out.
4. Precision Engineering means controlled ventilation—you'll always catch stray breezes—control draughts.
5. Precision Engineering means permanence—Ceco Steel Windows use more steel, last the lifetime of your home.
6. Precision Engineering means Bonderizing, a special process for sure protection against paint failure and rusting.
7. Precision Engineering means all these important advantages at no premium cost!

MAKES THE BIG DIFFERENCE IN CECO CONSTRUCTION PRODUCTS

BUILDING REPORTER

(Continued from page 234)

a sliding tube in each leg. These sliding inner tubes are zinc plated for rust resistance and punched at intervals to receive the adjusting bolt. Details also have been incorporated to help the worker maintain good posture. Backrests are curved to fit properly against the small of the back, and are mounted on spring steel uprights which can be adjusted up and down to suit the occupant. Seats are furnished in both scroll type (formed) and round type. Seat material is non-splintering, oil-proofed

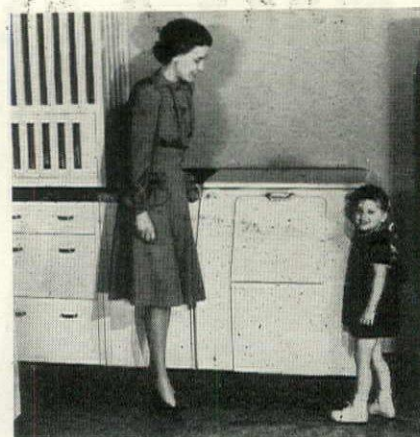
Masonite." This new line of chairs and stools will be sold at no increase in cost over the old angle-steel models.

Manufacturer: Royal Metal Mfg. Co., 175 No. Michigan Blvd., Chicago, Ill.

AUTOMATIC WASHING MACHINE is vibration free.

Name: Laundromat.

Features: Complete lack of vibration during the entire laundering cycle is an exceptional advantage in the new Laundromat. Completely automatic, it mixes water to correct temperature, fills itself, washes the clothes, rinses them, spins them nearly dry and shuts itself



off. The housewife has only to put in the garments, add soap and water softener if necessary, and set two dials—one for the water temperature, and the other for proper washing time. Prewash treatment, or the equivalent of overnight soaking, is also controlled by the dial. For the complete cycle of laundering the machine uses only about one-sixth of a kilowatt hr. of electric current. Installation may be made wherever there is a hot and cold water connection and an electrical outlet. The machine exterior is of white synthetic enamel and its shape resembles a desk, on the sloping front of which is a square door similar to an electric range. The washing basket is of porcelain and hold 9 lbs. of dry clothes. A pump expels the water when the washing process is completed and after rinsing the basket goes into a spin of 465 revolutions a minute with no vibration transmitted to the cabinet. Spinning continues until 72.3 per cent of the water is extracted from the clothes. The Laundromat then drains, cleans and shuts itself off.

Manufacturer: Westinghouse Electric Mfg. Co., 246 East Fourth St., Mansfield, Ohio.

CABINET SPRING CATCH improved.

Features: The Stanley 33 cabinet catch has been improved by substituting a wooden plunger for the former steel one. This change is not a war-time measure, but provides a better article with longer life and easier action. The new plungers are turned out of hard wood and are impregnated with oil to assure long wear and quiet action. Tests have proven the life of the plungers to be practically unlimited.

Manufacturer: The Stanley Works, New Britain, Conn.

PRESSURE SEALING TAPES for industrial and military uses.

Features: A complete line of pressure sealing tapes has been developed with acetate backings which reduce curlback and telescoping, and prevent "ooze" un-

(Continued on page 242)

Look Back

To SEE AHEAD

SINCE 1873, Burnham has, without interruption, been serving the Heating Industry with the finest and most modern Boilers and Radiators.

Introducing the newest developments in the Art of Heating has become legendary with Burnham.

With almost three quarters of a century of experience, you can be assured that the new products we introduce, when conditions permit, will be as modern and dependable as material, science and experience permits.

NOW IN STOCK AT ALL WAREHOUSES

Dole Air Valves
McDonnell Feeders and Cutoffs
Taco Heaters, Circulators, etc.
Thrush Circulators, Heaters, etc.
Venco Boiler Cleaner, etc.

Burnham Boiler Corporation

Irvington, New York Dept J

Zanesville, Ohio. Dept J

Export Department

50 Church St., New York 7, N.Y.

Who did it... **FIRST?**

By Betty Blackmarr

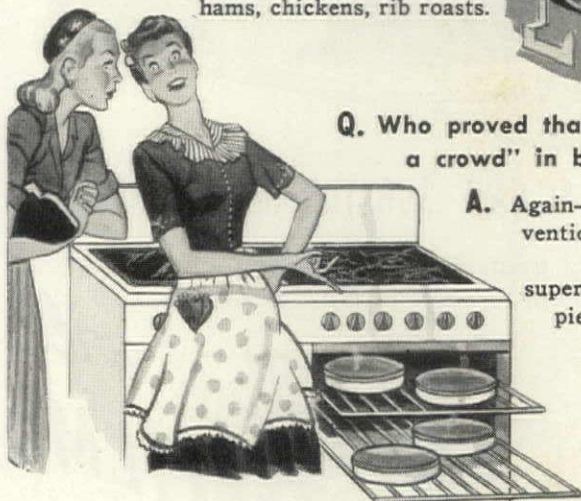
Q. Who took the stooping out of broiling?

A. Estate did it—way back in 1935—with the first waist-high broiler on a table-top range. It made broiling as easy as frying. A later Estate "first": the famous Bar-B-Kewer which made it possible to broil whole hams, chickens, rib roasts.



Q. Who proved that "even four needn't be a crowd" in baking pies and cakes?

A. Again—Estate. With the ingenious invention—the Air-Flow Oven (Balanced Heat Oven in electric models). These superior ovens actually enabled women to bake 4 pies, 4 cake layers, 8 loaves of bread or 56 biscuits at one time... all an even, tempting golden brown. And without shifting a pan.



Q. Who built the first "grill room" on the range top?

A. The Estate Grid-All was the first griddle plate built into the top of a modern range for the home... the handiest thing imaginable for grilling hamburgers, bacon, flapjacks.



Q. What's the most logical range to specify or install in the kitchens of tomorrow?

A. The range which, through the years, has always been years ahead in design and features for pleasanter, easier living—the ESTATE. (P. S.: No fuelish problems... Estate Heatrola Ranges available for city or bottled gas and electricity.)

FIRST WITH THE FINEST FOR OVER 100 YEARS

ESTATE

Heatrola

RANGES & Water Heaters

• FOR CITY GAS, BOTTLED GAS, ELECTRICITY •

Made only by THE ESTATE STOVE COMPANY, Hamilton, Ohio

The Architect AND PRECISION-BUILDING

One outstanding fact has impressed every one of the million people who have visited the Homasote* Homes exhibits in leading department stores throughout the country.



.... With the Homasote Precision-Built** System of Construction, the architect can design any home in just the way his client wants it.

For Precision-Built Construction is *not* prefabrication ... it is *not* based on standard sections, rigidly controlled and restricting design. Rather, it produces any size, style and type of home which you and your client may designate. Precision-Building is mass production applied to conventional construction.



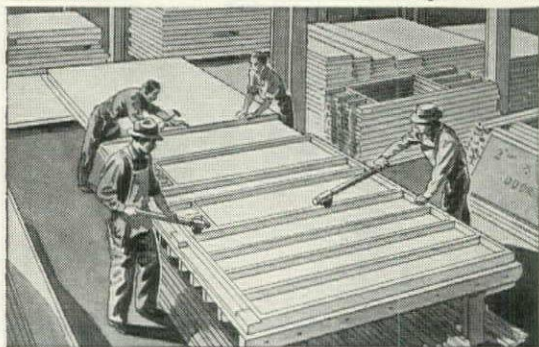
The one great overall purpose of Precision-Built Construction is to deliver more house for the money ... better materials, sounder construction, more convenience features; a house that is cooler in summer, warmer in winter, with the lowest of upkeep costs. And every Precision-Built Home, whether it costs \$4,000 or \$40,000, is built to the same high quality, in both materials and workmanship.

Precision-Built Construction is rapidly becoming a major force in home construction. \$8,000,000 worth of private homes, and \$30,000,000 in Government housing have already been built. So when you specify Homasote Precision-Built Construction for your client, you are giving him the advantages of years of engineered construction ... and insuring for him a machine-perfect house—of your own design. We invite you to write for the full details.



*Trade Mark

**Reg. U. S. Pat. Off.



HOMASOTE COMPANY, Trenton, N. J.

BLUEPRINTS FOR YOUR HOUSE of TOMORROW



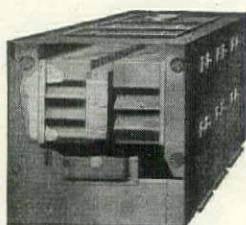
YOU MAY HAVE SCRATCHPROOF FURNITURE

Chemical treatment of wood may make scratchproof furniture a post-war reality.

BUT -

*Your Heating Plant will
be KOVEN WATERFILM*

Inventors promise many new improvements to add to your comfort and convenience in the post-war world...but then...as now, the KOVEN WATERFILM BOILER will be your best assurance of economical heating comfort. This smartly jacketed boiler incorporates all the latest scientific developments to bring you quick heat, even room temperature and a plentiful supply of hot water. The patented construction of this fast steaming boiler cannot be duplicated by any other boiler on the market. Made in a variety of sizes, there is a WATERFILM BOILER for every type of home and industrial building.



SECTIONAL SERIES for war plant or apartment house use...can be taken through a 2 foot door.

WATERFILM BOILERS, Inc.

154 OGDEN AVENUE

JERSEY CITY, N. J.

PLANTS: JERSEY CITY, N. J. • DOVER, N. J.



SYLVANIA offers new **FLUORESCENT FIXTURE CATALOGS**

to Architects. Release of steel for fluorescent

fixture fabrication has added commercial and industrial models to the Sylvania Fluorescent Fixture line. The two catalogs illustrated above cover these additions and describe design improvements you will want to know about. Just fill in the coupon below, and a file folder containing these catalogs will be sent to you without obligation on your part.



SYLVANIA ELECTRIC PRODUCTS INC.
Dept. AF 10 Boston Street, Salem, Mass.

Please send me the new Sylvania Industrial and Commercial Fixture catalogs.

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____

BUILDING REPORTER

(Continued from page 238)

der pressure. All the tapes have high tensile strength, are weatherproof, highly resistant to moisture and vapor penetration, and are unaffected by extreme temperatures, sea air, or chemical fumes. They are offered for every use including sealing, identifying, coding, labeling, splicing, insulating, riveting, holding, protecting, attaching, mounting, mending, reinforcing, packaging, and decorating. The full line consists of transparent, single and multi-colored,

printed, riveting, luminous, electrical and masking tapes, and are available in widths ranging from 1/2 in. to 18 in.

Manufacturer: International Plastic Corp., Morristown, N. J.

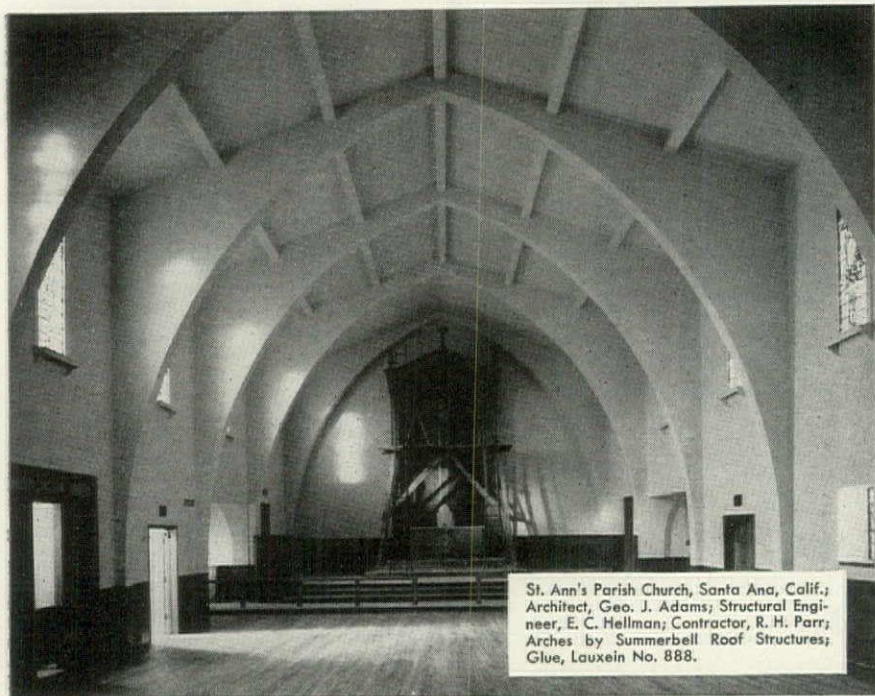
ROOM-TEMPERATURE-SETTING RESIN GLUE produces durable boilproof wood joints.

Name: Cascophen RS-216.

Features: This synthetic resin glue, used with a separate dry-powder catalyst, sets at 70° or warmer forming a bond that meets the most rigorous joint tests required by any current U. S. Government specifications. This adhesive for wood provides good bonds at low

pressures, if surfaces being glued are brought into uniform contact. The bonds are immune to mold or fungus, can withstand immersion in boiling water, exposure to moist or dry heat and continuous exposure to water or moisture. Cascophen RS-216 can be stored for an indefinite period at room temperature. It is recommended for work where complete durability is required and where joints cannot be heated.

Manufacturer: Casein Co. of America, Div. of the Borden Co., 350 Madison Ave., New York 17, N. Y.



St. Ann's Parish Church, Santa Ana, Calif.; Architect, Geo. J. Adams; Structural Engineer, E. C. Hellman; Contractor, R. H. Parr; Arches by Summerbell Roof Structures; Glue, Lauxein No. 888.

Designed for Lasting Beauty . . . Strength with WOOD AND LAUCKS GLUE

THE strong, graceful lines and clean, unbroken surfaces of these arches illustrate vividly the design possibilities of wood laminated for increased strength and lasting beauty with Laucks construction glue.

Early in the war you heard about laminated structural members chiefly as a means to faster construction and lower costs, and as a substitute for critical steel, in projects ranging from Army huts to giant aircraft hangars.

Now alert architects and engineers are recognizing the inherent advantages of wood combined with Laucks glue — strength, durability, and uniformity. When peacetime construction is resumed, you are sure to see many more interest-

ing new design treatments like these arches in scores of *permanent*, postwar building types.

For more information on the many possibilities of laminated arches and beams . . . plywoods . . . and the use of construction glues in stressed cover structures and gry-built construction . . . write or wire the world's largest manufacturers of waterproof and water-resistant glues.

I. F. LAUCKS, Inc.

A Subsidiary of Monsanto Chemical Company
Lauxite Resin • Lauxein Glues

SEATTLE (4)—911 Western Avenue; LOS ANGELES (1)—859 E. 60th Street. **Factories:** Seattle, Los Angeles, Portsmouth, Va., Lockport, N. Y. In Canada, address: I. F. Laucks, Ltd., Granville Island, Vancouver, B. C., or Hercules-Lauck Merritt, Ltd., Stanbridge, Quebec.

CONSULT LAUCKS

AMERICA'S GLUE HEADQUARTERS



TWO-WAY LOUD SPEAKER in compact form.

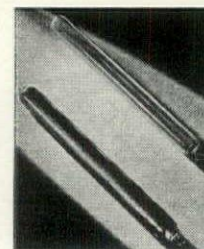
Name: Altec Lansing Duplex Speaker.

Features: This compact, multi-cellular loud speaker combines both high and low frequency units to increase the efficiency of present paging and public address systems up to 500 per cent. The speaker, less than 1 1/2 cu. ft. in size, covers an area twelve times greater than that of the single unit speakers now in use. This increased area of distribution means that fewer speakers are required in paging and public address systems, and that pitch, quality, clarity, volume and coverage are greatly improved.

Manufacturer: Altec Lansing Corp., 1210 Taft Bldg., Hollywood 28, Cal.

PLASTIC SLEEVE filter for black light.

Features: Tubes of Tenite plastic, dyed by a special process, form sleeves over fluorescent lamps to provide black light (which activates fluorescent dials on instrument boards). The filter and lamp combination costs much less than



black light sources produced by mercury and carbon arc lamps. The plastic has good dimensional stability and is extruded to close tolerances to assure fit between lamp and sleeve. Postwar applications may be on automobile dashboards, radio and television dials, etc.

Manufacturer: Lion Mfg. Co., Chicago, Ill.

(Continued on page 246)

Modern floors do a real selling job in modern stores



● A fact which is strikingly proved by sales figures from coast to coast. Whether in great department stores, as in Gimbel Brothers in Philadelphia whose Bath Room Specialty Shop is shown above, or in smaller stores of every type, this most modern of floors—Nairn Linoleum—is being most effectively and convincingly proven as the outstanding floor for your postwar buildings.

A handbook on linoleum specifications has been prepared for your use. May we send you your copy?

CONGOLEUM-NAIRN INC., KEARNY, N. J.

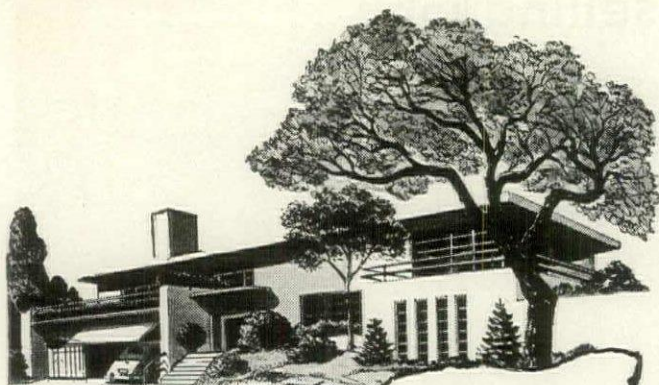
After years of continuous heavy service, Nairn Veltone Pattern #2956 in this Gimbel Brothers Salesroom is fresh, beautiful—like new.

For modern floors and walls

NAIRN LINOLEUM

easy to maintain,
colorful, permanent, resilient.

PREVIEW OF POSTWAR SPECIFICATIONS



...connections
from house-to-sewer
to be of Orangeburg
Fibre Pipe ...

Even the "dream house" of tomorrow, equipped with such features as solar heating and many other revolutionary improvements that seem incredible now, will have to be practical.

That's why ORANGEBURG PIPE will be so widely specified in postwar plans for house-to-sewer connections, and all other non-pressure uses outside the building ... ORANGEBURG PERFORATED PIPE for septic tank filter beds, foundation footing drains, and subsoil drainage.

This permanent, non-metallic pipe is made of cellulose fibre impregnated with coal tar pitch. Non-corrodible ... does not chip or break easily ... does not crack under temperature or soil changes. Tight joints, easily made with TAPER-WELD couplings without cement or compound, prevent infiltration and entry of root growth. Perforated pipe is joined with snap couplings which keep pipe in line and keep out backfill. Light weight, long lengths, and fewer joints mean easier installation. First and ultimate costs are surprisingly low. Write for descriptive booklet.

THE FIBRE CONDUIT COMPANY, ORANGEBURG, N. Y.

ORANGEBURG FIBRE PIPE

ORANGEBURG WITH 50 YEARS' EXPERIENCE IN THE MANUFACTURE OF NON-METALLIC CONDUIT AND PIPE, SERVES THE POWER AND LIGHT, TELEPHONE, GENERAL CONSTRUCTION, CHEMICAL, PETROLEUM, PLUMBING AND BUILDING SUPPLY FIELDS WITH ELECTRICAL FIBRE CONDUIT ... ELECTRICAL UNDERFLOOR DUCT SYSTEMS ... AND FIBRE PIPE FOR NON-PRESSURE USES.



SPOT SASH CORD

REG. U.S. PAT. OFF.

is
TOPS
in Value

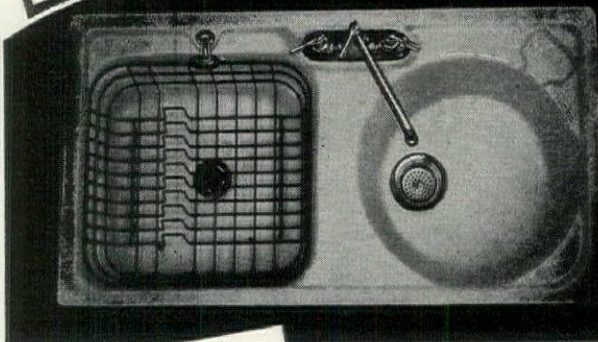


SAMSON CORDAGE WORKS

BOSTON 10, MASS.

Availability somewhat limited by war conditions

EBCO Dishwashing SINK



MORE CONVENIENT & EFFICIENT
MORE BEAUTIFUL & SANITARY
MORE DURABLE—LONGER LASTING
MORE ECONOMICAL TO INSTALL

The EBCO has everything women want in sink efficiency and convenience — plus features that assure maximum ease and economy of installation. Its patented round dishwashing compartment, large dual strainer, extra-long swing-spout mixing faucet, handy spray fixture, integral soap dish, non-drip edges and other work-saving conveniences are matched by its neat, streamlined beauty! No wonder it's called "America's new sink standard!" Fixtures are mounted on the flat back ledge—no in-the-wall piping is required. The flat rim insures a watertight fit to any type of sink top. Get full details now on the favorite sink for tomorrow's homes—the EBCO Dishwashing Sink!

Write Today
FOR DETAILS ON
AMERICA'S SINK CHOICE

EBCO MFG. CO.
401 W. TOWN ST. COLUMBUS, OHIO

**HIDES
the
TUBING...**



but **NOT** *the light!*

Lumitile is the amazing new shield that hides and protects fragile tubes and at the same time increases the emission surface from that of the bare tube itself, to twelve or more inches wide. Where is the tubing in the above unretouched photograph? Exactly three and one half inches behind the Lumitile! Here is perfect diffusion of light without its source being discernible.

Lumitile is molded of styrene; is resistant to water, acids, alkalis and alcohol; unaffected by age; does not warp. Wide variety of colors. Panels of Lumitile are welded from tile, and may be secured from lighting contractor in sizes needed. Lumitile truly will make cold cathode area lighting architecturally practical postwar. *Send for free folder giving further facts about Lumitile.*



Lumitile

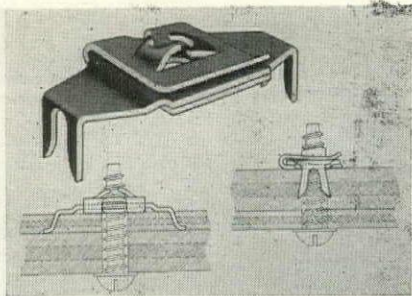
327 EAST EIGHTH STREET
CINCINNATI 2, OHIO

BUILDING REPORTER

(Continued from page 242)

SELF-LOCKING SPEED NUT for plywood.

Features: This self-locking speed nut can instantly be anchored into plywood of any thickness. When driven into thick plywood the legs are forced outward to anchor the nut in screw receiving position. When used with thin plywood the locking legs peen over when driven against a backing plate thus anchoring the nut. The "U" type speed nut, snapped over the saddle, provides "float" to compensate for any misalignment of clearance holes. The saddle is offset to



retain full contact with the plywood. The large bearing surface distributes the load over a greater area than is usually possible with ordinary fasteners. Available for use with 6Z, 8Z and 10Z

sheet metal screws and 6-32, 8-32 and 10-24 machine screws.

Manufacturer: Tinnerman Products, Inc., 2036 Fulton Road, Cleveland 13, Ohio.

FLOOR TOPPING for industrial plants.

Name: Ferem.

Features: Ferem, a "Blue Temper" component, contains all the desirable characteristics of hardeners, admixtures and processed components. It requires only the addition of cement and water to produce floor toppings with approximately four times the compressive and tensile strength of ordinary cement topped floors. Ferem is used exclusively as the "Blue Temper" component in place of sand and gravel or stone in floor toppings of dairies and industrial plants where floors are subject to heavy traffic or where resistance to water, oil and dilute acid spillage is necessary. It is used on shipping room floors, or any heavy duty floor, corridor or runway which is subject to shock or abrasion. It is also useful for patching, resurfacing or relaying worn floors.

Manufacturer: A. C. Horn Co., 43-36 10th St., Long Island City, N. Y.

PLASTIC FOAM offers good insulation.

Features: Plastic foam, which is lighter than rock wool, glass or cork and weighs less than 2 lbs. per cu. ft., is particularly good for insulation. It is also lower in heat conductivity than any of the three. The mixture, which resembles molasses, is self-raising and self-curing. It will begin to foam within 2 to 5 minutes after the mixing stops and cures without ap-



plication of heat or any other element. A quart will expand sufficiently to fill a 7 to 8 gal. receptacle in about 10 minutes, with the little heat needed self-generated by the mixture itself. Present uses are secret, but postwar uses promise many applications, especially where insulation is required.

Manufacturer: General Electric Co., Schenectady, N. Y.

(Technical Literature, page 250)

POINT FOR POINT FLAME-PROOFED COTTON INSULATION *is Best!*

Cotton is a "natural" as an insulation agent. Its ability to stop heat (low thermal conductivity) and its amazing light weight are features unsurpassed by any other commonly-used insulation.

And Lo-"K" specially-processed Cotton Insulation is especially flame-proofed for protection...backed by a heavy Kraft paper for an added moisture barrier.

Cotton's unique insulating features, plus the advantages of modern processing, have made Lo-"K" a leader in the insulation field. For better building, investigate the fine points of Lo-"K" FLAME-PROOFED COTTON INSULATION.

Lo-"K" is manufactured to strict Federal Specifications.

Features Which Make Lo-"K" a Better Insulation

- **Flameproof**... will resist a blow-torch temperature of 1800° F.
- **Low in thermal conductivity.** The "k" factor is only 0.24.
- **Light in weight**—only 1/4 lb. per cu. ft.
- **Low in cost and lasts indefinitely.** Pays for itself in fuel savings alone.
- **Easy to handle**... the blanket-type rolls fit snugly. Cuts labor costs... will not cause skin irritation.
- **Resists moisture, rot, mildew, vermin.**
- **Clean.** Walls and ceilings will be free from smudging.
- **Fluffy**—creates more air cells after installation. Will not sag or settle.

Lo-"K" IS AVAILABLE NOW!



A PRODUCT OF
LOCKPORT COTTON BATTING CO.
ESTABLISHED 1870

Lo-"K" COTTON INSULATION DIVISION—Dept. AF-10
Lockport Cotton Batting Company, Lockport, N. Y.

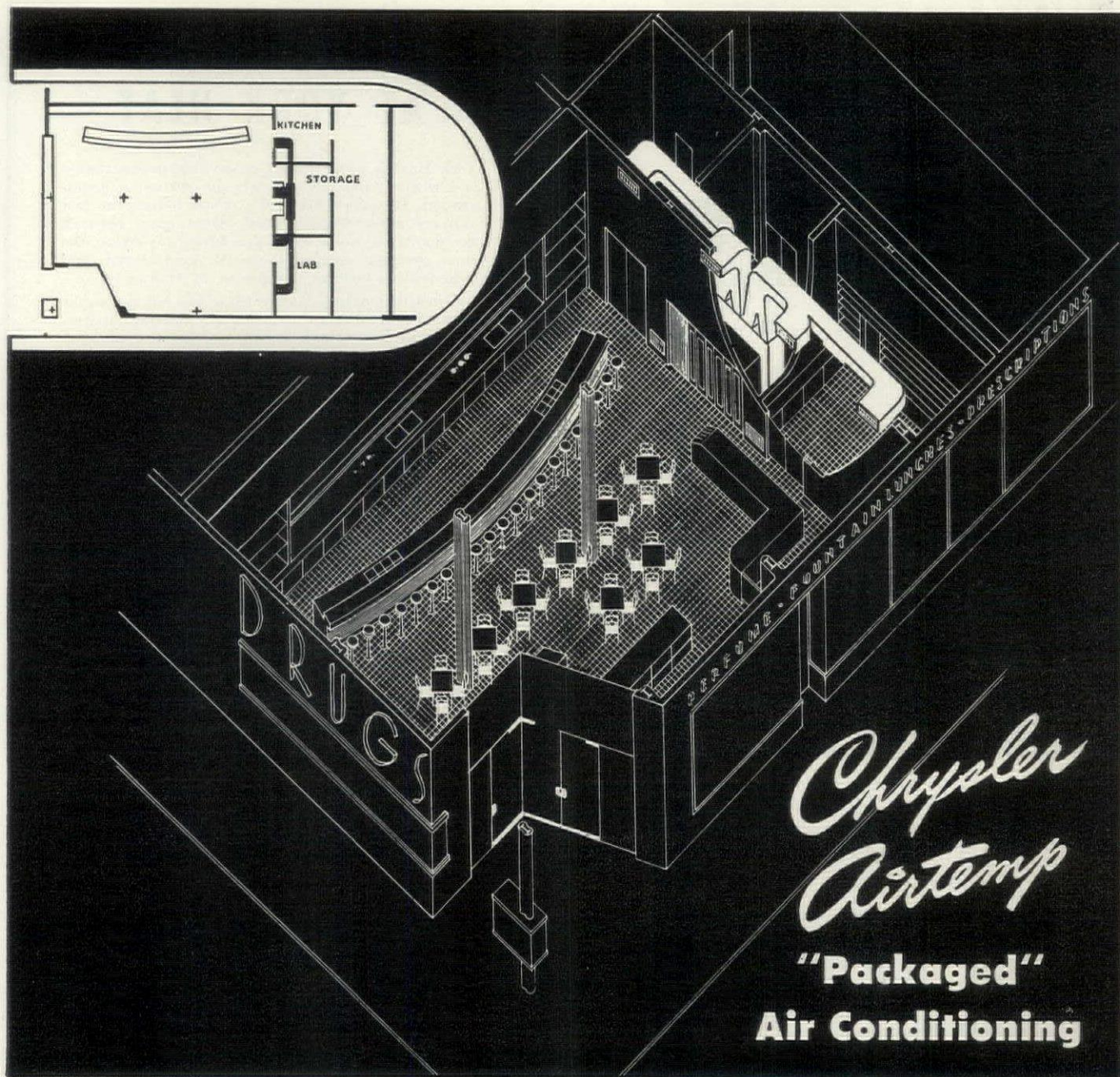
Gentlemen: Please send me complete information about Lo-"K" Cotton Insulation.

☐ Architect ☐ Contractor or Builder ☐ Dealer

NAME.....

ADDRESS.....

CITY.....ZONE.....STATE.....



Chrysler
Airtemp
"Packaged"
Air Conditioning

Pulls Increased Patronage to Drug Stores

Concealed behind walls, or out in the open, Chrysler Airtemp "Packaged" Air Conditioning keeps the atmosphere in drug stores odorless, fresh and stimulating to customers.

When the war is won, the public will insist on the comfort of air conditioned drug stores. New buildings, with their many new modern features, will be obsolete without year 'round temperature-humidity control. Druggists know this fact! They are asking architects

to include Chrysler Airtemp "Packaged" Air Conditioners which, in combination with the famous Airtemp Percolator Boiler, provide ideal year 'round indoor climate control—plus adequate hot water.

Chrysler Airtemp offers architects helpful cooperation in making plans and estimates not only for cooling, but heating and commercial refrigeration installations. Airtemp Division of Chrysler Corporation, Dayton, Ohio. • In Canada, Therm-O-Rite Products, Ltd.

Buy More War Bonds! Tune in Major Bowes every Thursday, CBS., 9 p. m., E. W. T.

CHRYSLER  **AIRTEMP**
HEATING • COOLING • REFRIGERATION

Write for One of These New Books

EICHLEAY service includes steel erection, moving structures, foundations for heavy machines, installing machinery, relocating industrial units, and related projects. Frequently while foundations are being constructed machinery is erected and then moved to location, thus saving much "down time".



EICHLEAY
33 S. 19th St., Pittsburgh 3, Pa.




"America's Finest Gas Range"

You'll even surpass the expectations of your post-war clients when you specify new Roper gas ranges for the modern kitchens you'll plan.

Always distinctive! Proved dependable! The new post-war Roper with many advanced improvements is sure to gain even greater preference among America's housewives.

GEO. D. ROPER CORPORATION, Rockford, Ill., manufacturer of ROPER "America's Finest Gas Range," for all gases including L. P. (Liquefied Petroleum) gas.

ROPER
GAS RANGES

SPECIFY WAR BONDS NOW ★ A ROPER  GAS RANGE LATER

NO GEAR-CLASHING AT YORK HEAT

York Heat is going all-out on civilian production—and without passing through the throes of reconversion. It wasn't necessary. Even before the last military application of York Heat cases through the doorway, work will have been started on the most complete line of domestic, commercial, and industrial oil-burning equipment in America.

Consistent national advertising has led the public to expect the ultimate in automatic heating satisfaction from York Heat. It will not be disappointed. War-developed advancements, evolved in meeting rigorous Government specifications, confer unique dependability, efficiency, and economy on York Heat's post-war models.

Purchase is stimulated by competitive price—and made easy by a simple, non-recourse financing plan which, with practically no capital investment by builder or distributor, carries York Heat from factory to customer. Flawless service is assured by a nationwide distributor organization, which sells complete heating satisfaction, rather than mere equipment.

York Heat merits your earnest consideration—Now.

YORK HEAT

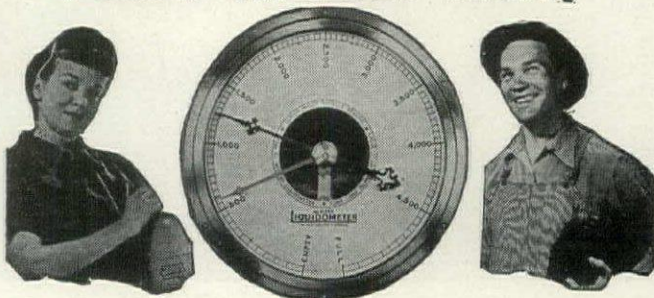


Division of YORK-SHIPLEY, INC., YORK, PA.

MEMBER OIL HEAT INSTITUTE OF AMERICA

Buy More Bonds for Victory

TODAY OR POST-WAR!



*It Is Important to Measure Valuable
Stored Liquids Accurately With -*

LIQUIDOMETER Tank Gauges

"THEY'RE ALWAYS DEPENDABLE"

100% automatic.

No pumps, valves, or auxiliary units needed to read them.

Models available for either remote or direct readings.

Accuracy unaffected by specific gravity of tank liquid.

Approved by Underwriters' Laboratories for gauging hazardous liquids.

Write for complete details.

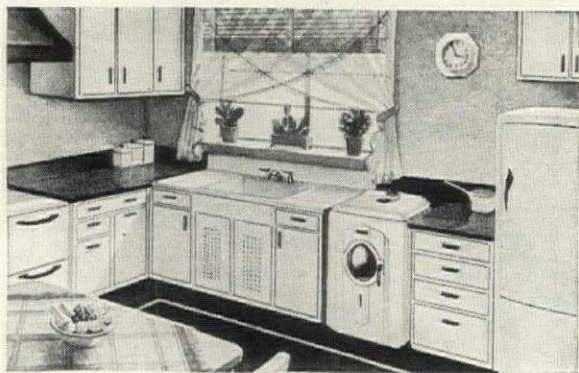
THE **LIQUIDOMETER** CORP.

36-30 SKILLMAN AVE., LONG ISLAND CITY, N. Y.

*"I wish your mother could have had
a BENDIX!"*



Soon, Every Mother Can Have This Modern Home Laundry Miracle!



**FITS ANYWHERE... OPERATES PERFECTLY
... THANKS TO EXCLUSIVE BENDIX DESIGN**

KITCHEN . . . Counter high. Compact. White finish.
PLAYROOM . . . Quick way to modernize a laundry.
BATHROOM . . . Clean, neat, gleaming white.
BASEMENT . . . Excellent spot for the Bendix.
UTILITY ROOM . . . Perfect here and everywhere.

Modern women want no old-fashioned washing machines in their "homes of tomorrow." By the tens of thousands, they are clamoring for the one-and-only Bendix Automatic Home Laundry—as beautiful, as efficient as their dream home, itself! But the Bendix is not a dream. It's a blessed reality that washes, rinses and damp-dries clothes at the click of a switch! Takes only 4 square feet of floor space. Fits anywhere. Eliminates set-tubs. In many states is eligible for FHA financing. And soon, the Bendix will again be available. Helping them and helping you, too. Helping to sell the house, and increase the property value. Soon no home will be truly modern without the Bendix!

DE LUXE MODEL: 26" wide, 38" high, 22 $\frac{3}{4}$ " deep.

STANDARD MODEL: 25 $\frac{1}{2}$ " wide, 35" high, 22 $\frac{3}{4}$ " deep.

BENDIX^{automatic} Home Laundry

Bendix Home Appliances, Inc., South Bend, Indiana . . . Pioneers and Perfectors of the Automatic "Washer" . . . Not Affiliated with any other Organization of Similar Name

TECHNICAL LITERATURE

WINDOWS. *How and Where to Use More Windows*, 12 pp., 8½x11. This booklet gives advice on general practical uses and abuses of windows in the home. It advocates more windows and features attractive bay arrangements, correct groupings, corner windows, picture windows, and gives consideration to the use of these possibilities in remodeling. Hints on what to look for in choosing windows, are also included. Curtis Companies Service Bureau, Clinton, Ia.

PLASTICS. *Plaskon, Plastic Materials for Modern Industrial Production*, 16 pp., 8½x11. This booklet describes the properties of various types of Plaskon compounds and covers the use of these materials for modern industrial production. A wide variety of products molded from the different types of resin are illustrated to demonstrate their practical application. Plaskon Resin Glue for bonding materials is also included. Plaskon Div., Libbey-Owens-Ford Glass Co., 2138 Sylvan Ave., Toledo 6, Ohio.

ARC WELDING. *Practical Design for Arc Welding, Vol. 1*, 107 pp., 8¾x11½. Price \$3.50. The first of three volumes following the original publication of design plates in loose-leaf form, this book contains 100 plates illustrating welding procedure. These detailed drawings show how tubing, plate, sheet, standard steel sections, angles and bars can be used with arc welding to fabricate stronger products of improved appearance at lower cost. The book offers practical working information for the welder, manufacturer, engineer and designer who are looking to the advantages of arc welding in present and postwar production. It contains a complete work sheet in graph form opposite each design plate, on which can be made notes, estimates and sketches as the design plate relates to the projected design. A record form also on the work sheet, can be used to suggest and analyze applications of design ideas to the users own products, with a permanent record of such procedure. All design

plates are clearly marked with American Welding Society symbols, and a cross reference index indicates the design plates that involve specific details such as bases, bosses, columns, frames, gussets, lugs, etc., that are common in many welding applications. Hobart Bros. Hobart Square, Troy, Ohio.

MOVABLE STEEL WALLS. *Steel Mobilwalls, Sound Proofed and Sound Absorbing*, 27 pp., 8½x11. Descriptive catalog gives advantages, specifications, details and uses of movable, re-usable, soundproof steel and combination steel and glass partitions. Erection and rearrangement features, soundproofing and fireproofing insulation, special wall accessories, finishes, costs, wiring facilities and other advantages are covered for the various types of partitions. Details of the flush type, semi-flush type, movable molded. Mobilscreen and Mobilrail partitions are included with specifications for each. Sneed & Co., Orange, Va.

PLASTICS. *Plastic Stock Molds*, 168 pp., 8½x10½. This pictorial presentation contains illustrations and descriptions of all current stock injection and compression molds, extruded cross-sections, and laminated sheets, rods and tubes. Practically all existing stock molds in the plastic industry have been gathered together in this book by Modern Plastics Magazine for the specific use of manufacturers. Designed for easy reference, each stock mold item is numbered and indexed with the name of the molder, extruder or laminator. This catalog, a direct line between the customer and the molder, should be of great value to every user of molded plastics, since the use of stock mold saves many time-consuming and expensive operations. Stock Mold Dept., Modern Plastics Magazine, 122 E. 42nd St., New York 17, N. Y.

UNIT HEATERS. *Modine, Vertical Delivery Unit Heaters, Bulletin 144; Modine Horizontal Delivery Unit Heaters, Bulletin 144-A*. Both 8 pp., 8½x11. Two bulletins offer complete descriptive data on the new lines of copper condenser unit heaters for horizontal and vertical air delivery. They include design details, air control devices, uses, installation information, sizes and steam and hot water performance tables for both types of delivery heaters. Diagrammatic photographs illustrate the construction features of each. Also incorporated into the bulletins is engineering information on Low Outlet Temperature Models designed for use on steam pressures of 30 lbs. and greater. Modine Mfg. Co., Racine, Wis.

ELASTIC STOP NUTS. *Esn Data Book and Catalog*, 119 pp., 9¼x11¾. This catalog and data book, which is practically an engineering handbook, gives information on hex, anchor and clinch types of nuts. All the necessary data for intelligent planning of vibration-proof connections are arranged in handy, tabulated form to save the design engineer time and figuring. Size, material, class fit, axial load strength based on pull-test data, military requirements, weight, finish and other information is also included. Present applications of the nuts showing how they solve difficult fastening problems are illustrated, and suggestions for typical applications are offered to help designers plan products so as to eliminate the dangers and annoyances of loose bolted connections. Elastic Stop Nut Corp., Union, N. J.

PILE DRIVING. *Pile-Driving Handbook*, 276 pp., 5¾x8¾. Price \$4.50. This handbook of American practice in pile driving, by Robert D. Chellis, provides ready information for use in designing and driving pile foundations. By a discussion of the practical and theoretical factors involved, it assists the engineer in obtaining safe and economical results in the handling of actual pile foundation problems. Chapters are devoted to the Philosophy of Pile Foundations, Pile-Driving Analysis and Application of Formulas, Speed, Stroke, and Driving Stresses, Selection of Driving Equipment, Selection of Type of Pile and Methods of Driving, Effects of Pile Spacing and Grouping, Design of Piles for Loadings, Types of Concrete Piles, Deterioration and Preservation of Piles. Many tables, formulas and their applications, summary of comparative results of tests, methods of making test loadings, and standard specifications are included along with a store of other helpful information. The book is amply illustrated with photographs and drawings. Pitman Publishing Corp., 2 W. 45th St., New York 19, N. Y.

REQUESTS FOR LITERATURE

Mr. Henry C. Babcox, 1906 E. 105th St., Cleveland, Ohio, is interested in receiving literature on prefabrication.

Paul Olson, industrial designer, 7832 Crocker St., Los Angeles, Cal., would like to receive information on all products, tools and machinery connected with building.

That's when, the song says, "I'm coming back to you." There have been a lot more things than apple blossoms in Normandy this year, but Lawson metal bathroom cabinets won't be back for some time. For though the Allies have made magnificent progress, much remains to be done.

So Lawson production is still chiefly military and the manufacture of our regular bathroom cabinets cannot yet be resumed. But, the way things are progressing, we all have the right to be hopeful. Perhaps, when it's next blossom time in Normandy, we will be—happily—coming back.

LAWSON CABINETS

When we say that Lawson Warwood Cabinets are the finest bathroom cabinets now being made, we want it understood that they are not as good as the metal cabinets we used to produce, and that we'll produce again when the war is over. But the Warwood is the most satisfactory wooden cabinet on the market—the best that wartime conditions allow us to make.

THE F. H. LAWSON COMPANY

Cincinnati 4, Ohio

Lawson
BATHROOM
CABINETS

128 YEARS
OF QUALITY

STEEL SASH



*...practical, modern, beautiful,
but... WILL IT RUST?"*

Certainly steel is the practical, modern, economical material for sashes. Its great advantage lies in its permanency—an advantage it has only when properly protected against rust.

Hot Dip Galvanizing provides the perfect and inseparable fusion of the heaviest possible zinc coating to iron and steel products, and protects by sacrificial action. Laboratory and field tests both prove that this method is the best and more economical rust preventive.

If you want to be sure of the permanent beauty or usefulness of the iron or steel articles you buy, be sure to specify "Hot Dip Galvanizing." If you make articles of iron or steel, be sure of getting a genuine and expert job of Hot Dip Galvanizing by sending your materials to one of the members listed at the right. American Hot Dip Galvanizers Association, Inc., First National Bank Bldg., Pittsburgh 22, Pa.

"If it carries this seal
it's a job well done."



Buy from the qualified members listed below and KNOW you are getting a genuine HOT-DIP job.

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ATLAS GALVANIZING, INC., LOS ANGELES
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JOSLYN CO. OF CALIFORNIA, LOS ANGELES
WESTERN GALVANIZING COMPANY, LOS ANGELES
HUBBARD & CO., OAKLAND
JOHN FINN METAL WORKS, SAN FRANCISCO
SAN FRANCISCO GALVANIZING WORKS, SAN FRANCISCO
SUPERIOR PACIFIC GALVANIZING CO., LOS ANGELES
RHEEM MANUFACTURING CO., RICHMOND
INTERNATIONAL DERRICK & EQUIPMENT CO., TORRANCE

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WILCOX, CRITTENDEN & COMPANY, INC., MIDDLETOWN

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ILLINOIS

EQUIPMENT STEEL PRODUCTS DIVISION OF UNION ASBESTOS AND RUBBER CO., BLUE ISLAND
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STANDARD GALVANIZING CO., CHICAGO

MAINE

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OLIVER IRON & STEEL CORPORATION, PITTSBURGH

RHODE ISLAND

JAMES HILL MFG. CO., PROVIDENCE

WASHINGTON

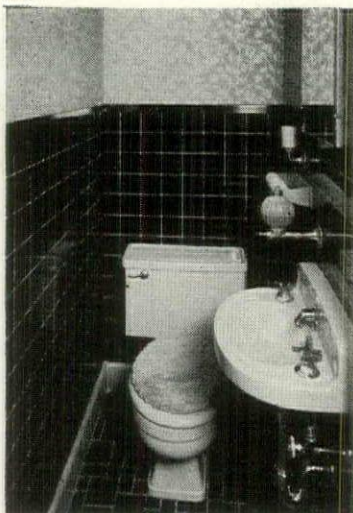
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Not just Galvanizing
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Adapt This Idea To Your Own Needs

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Write for nearest dealer and/or catalog

BARCLAY MANUFACTURING COMPANY, INC.

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Majestic

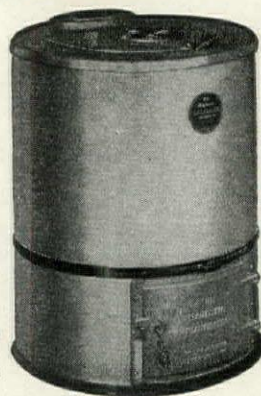
Home Incinerators

Portable or Built-in

You can meet every need in the rapidly growing demand for quick, easy low-cost garbage disposal right in the home with Majestic Incinerators. Model No. 30, shown at right, is Majestic's popular *fuelless* portable unit featuring an ingenious draft design that burns *wet or dry* garbage quickly, sanitarily, without separate fuel! Majestic also makes gas-, coal-, and wood-fired incinerators for both portable and built-in installation. Write for details!

THE MAJESTIC COMPANY

942 Erie St., Huntington, Indiana



Building Necessities



Get Around
Every Trim Problem
with

B&T Metal Trims

trademarked

CHROMEDGE

Trade Mark Reg. U. S. Pat. Off.

They give you the right answer to every need for decorative trims. And they will be available for your post-war jobs with more new features than ever!

The B&T Metals Company
Columbus 16, Ohio



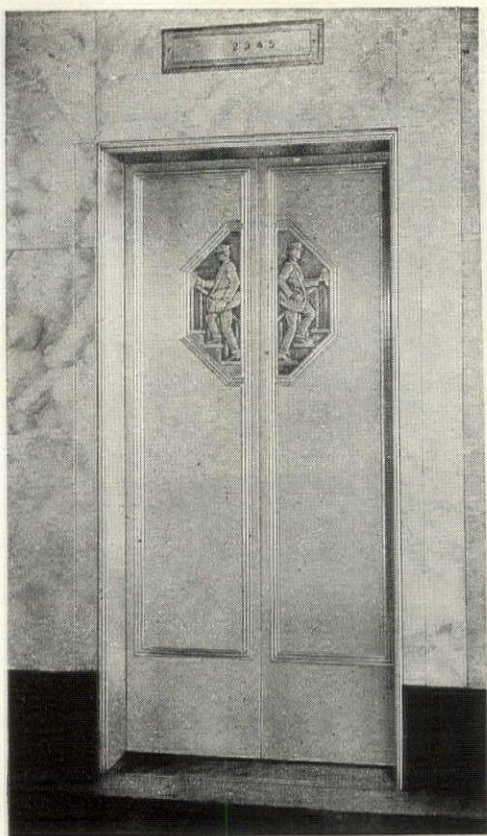
Here's Why
Cabot's Paints

Last Longer on any Surface!

WHETHER it's wood, brick, stone or stucco, architects find Cabot's Collopakes give a more enduring finish to building surfaces because they are *colloidal* paints. By the patented Collopaking process, pure pigments are reduced to a sub-microscopic fineness — 100 to 1000 times as fine as ordinary paint pigments — and united inseparably with wear-resistant oils. That's why Cabot's Collopakes have greater covering and hiding powers — show no brush marks — hold their rich lively colors for years without fading or peeling!

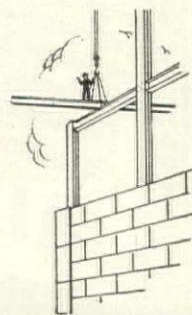
WRITE TODAY for color card and your copy of "The Little White Book." Contains complete information and illustrations. Samuel Cabot, Inc., 1274 Oliver Bldg., Boston 9, Mass.

**CABOT'S DOUBLE - WHITE
AND GLOSS COLLOPAKES**



“GOING UP!”

is YOUR *business, too*



Under modern conditions of living *and working*, efficient, vertical transportation is just as essential as roof and windows. Any multiple-story structure built today without elevator service would be a “white elephant” of the worst sort. One of the most important factors in fast travel between floors are Dahlstrom Elevator Entrance Doors. That they can do their part well is best proven by the great number of Dahlstrom installations in many of

our finest buildings... both public and private ... all over the country.

In your planning... when you come to this business of “going up”... remember the service that Dahlstrom offers, and has offered for 40 years; Design and Engineering Staffs ready, willing and able to work with you and your clients. Working in this manner, you can save considerably in time when Building’s green light goes on again.

Illustrated above: Dahlstrom first floor elevator entrance installation in the United States Post Office, Albany, N. Y. Gander, Gander and Gander, Architects.



DAHLSTROM

METALLIC DOOR COMPANY, JAMESTOWN, N. Y.

Branch Offices: NEW YORK, CHICAGO, PHILADELPHIA, BOSTON, CLEVELAND, ATLANTA, SAN FRANCISCO

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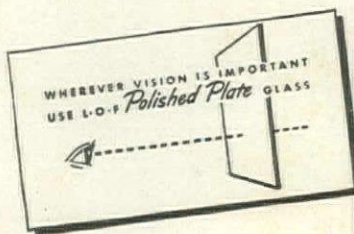
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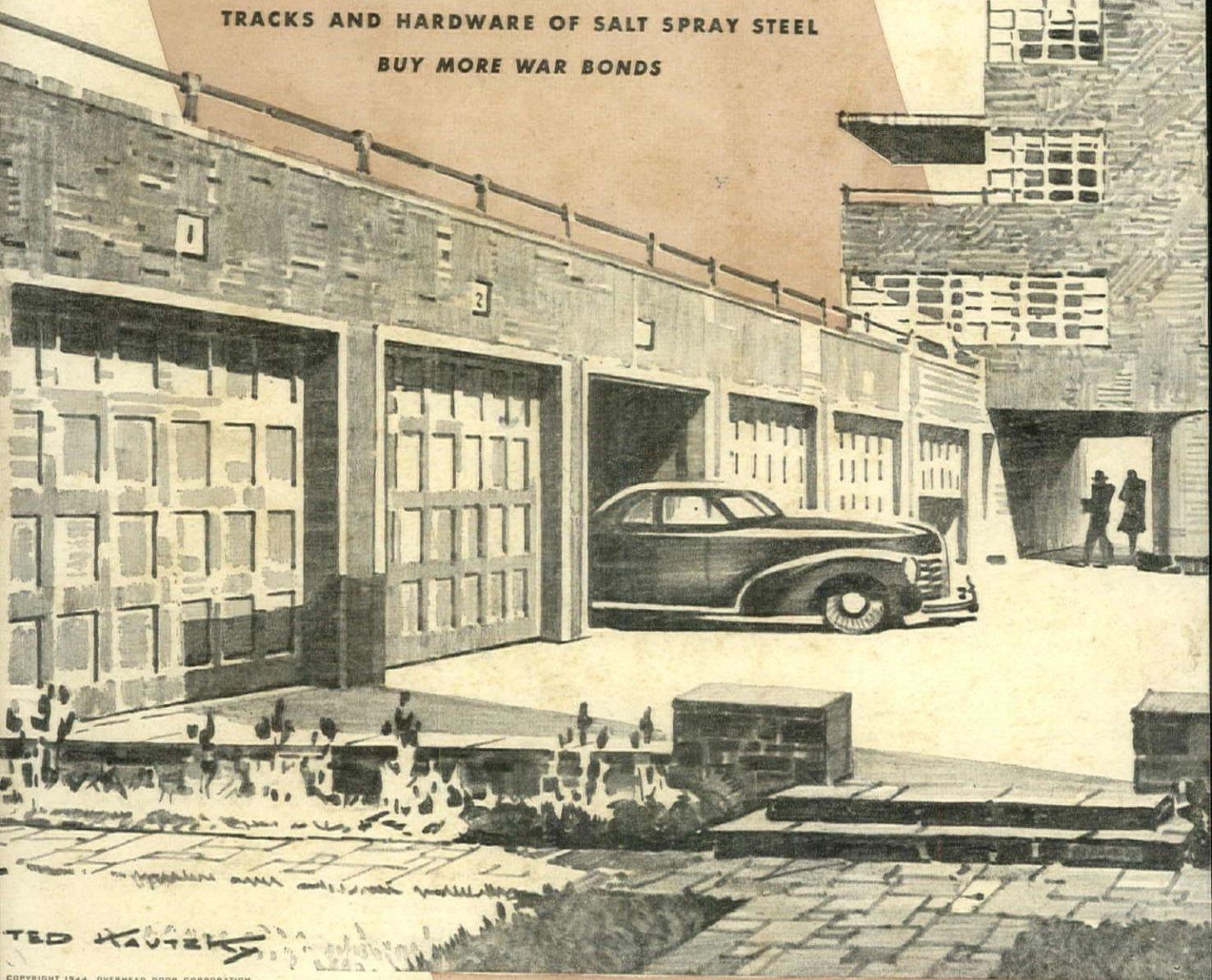
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